A HISTORY OF THE TERRIBLE EPIDEMIC, VULGARLY CALLED THE THROAT DISTEMPER, AS IT OCCURRED IN HIS MAJESTY'S NEW ENGLAND COLONIES BETWEEN 1735 AND 1740*

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INTRODUCTION

Both Young and Old, O come behold the Works which God hath wrought, The fearful Desolation, which he on this Land hath brought.

-Awakening Calls to Early Piety.

Almost as far back as written records go we find evidence that mankind has been afflicted by frequent recurrences of horrible epidemics. Periodically occurring without any apparent cause, each one has taken its toll of life and then departed as strangely as it came. They have halted social progress, determined the results of wars, and sometimes even threatened the existence of civilization itself. Nearly every age has witnessed some distressing disease in epidemic form. Leprosy and influenza were prevalent at the time of the Crusades and the Black Death of the Middle Ages is said to have destroyed one-fourth the population of the earth. The plague closed the theatres and retarded the full development of Elizabethan culture, and numerous other outbreaks followed down to the end of Stuart times. Smallpox and dysentery epidemics frequently occurred throughout the eighteenth century. Not so long ago, influenza spread rapidly around the world. We now fear the return of infantile paralysis. And so it goes.

It has long been known that there was an epidemic of some disease in Kingston, New Hampshire, in 1735, but it is not so well known that this was merely a small part of a greater epidemic which involved most of the inhabited regions of New England and caused great loss of life wherever it appeared. To that generation of Americans it was a new disease and to them its behaviour was as strange as it was mortal. In some of the towns nearly half of all

^{*} Presented at the Beaumont Medical Club, December 9, 1938.

the children died and at times it was feared that the disease would actually destroy the colonies. It drove the people to their churches to meditate and pray, and special fast days were proclaimed in Massachusetts and in Connecticut. "How terrible hath GOD been in his Doings," they cried, "Numerous Families have been emptied. A great Number of the Children are cut off from without, and the young Men from the Streets... We may reasonably conclude that GOD is giving of us Warning to prepare for all Events."

The excitement that prevails at the time of epidemics is usually in proportion to the severity of the disease. As an example, we have only to remember the infantile paralysis epidemic in New England in 1931. At first it was regarded as an unavoidable nuisance, but in a very short time the reports became more alarming. In spite of all precautions it continued to spread nearer and nearer to home and soon we were very much concerned. Then appeared the screeching headlines, pictures of dying children in mechanical respirators, long lists of horrible and dangerous symptoms, and frantic appeals for donors of blood. In a few months all was quiet again and when the statistics were compiled it was found that among every two hundred thousand people about ten deaths had occurred. us now compare this with the "throat distemper" of eighteenth century New England. That epidemic continued for at least five years and among an equal number of people about five thousand deaths occurred. Except in a very few towns, however, one finds no evidence of any great confusion, and certainly there was not the loss of self-control that people usually exhibit during great epidemics of this kind. Perhaps this apparent outward calm did not truly reflect the inward feelings of the people, but there is good reason to believe that it did, for with implicit faith in God they did not question the meaning or justice of their misfortunes. That they were submissive and composed may be one reason why most historians have overlooked this terrible disaster, although it was a major epidemic in the annals of this country and caused more deaths than any pre-Revolutionary war. But it seems that the emotions were only temporarily suppressed, for immediately following these five years of sickness and death, indeed, so close in time that a causal connection might be suspected, there occurred a period of intense excitement, that great psychological and religious upheaval better known as "The Great Awakening."

Outside of Boston and its environs, New England in 1735 consisted of numerous small isolated towns, each with from two hun-

dred to five thousand inhabitants. Products of the garden, field, and forest were brought to the larger towns, especially those along the coast, but except for an occasional fair, where produce, sheep, and cattle were bartered and except for help in the protection against Indian raids, each of the smaller frontier towns was self-supporting and independent of its neighbor. Although in the very early days most of the homes were grouped around the church and the central common, by 1735, particularly where the Indians were no longer feared, many of the homes were far from the center of the town and often widely separated from each other. Each family had its own supply of water, milk, and other foods and could live in comfortable seclusion even through the long cold winters when snowbound for many weeks. Therefore, it seems somewhat strange that an epidemic of a contagious disease could gain much headway because the means were at hand for an almost complete isolation had the most elementary precautions been enforced. But there was more to life than mere existence on a farm, and there were many complicating factors that might explain the spread of a disease.

To appreciate one complicating factor, one must consider the prevailing theories of contagion, best illustrated by the treatment of smallpox which was very common at that time. When a case occurred in Boston, for example, the patient was sent to either Spectacle or Rainsford Island where the province maintained pesthouses for the isolation and treatment of contagious cases. At one time, a house in the sparsely settled west end of the town was converted into a hospital and, while patients were there for treatment, a guard was thrown around the house and a red flag was hoisted to warn visitors of the danger. Ships coming from infected ports were stopped in the harbor, thoroughly inspected, and the crew and passengers were frequently detained until all danger of infection had Most of the provinces had stringent laws to prevent the spread of smallpox and other contagious diseases. In Rhode Island, the penalty for violation of the sanitary code was death "without benefit of clergy." It was also known that a person was generally immune following an attack of smallpox and was therefore less liable to spread the disease. Nurses and attendants had to prove that they had been previously infected and a pock-marked slave had an increased value at the market. The intense controversy that followed the introduction of inoculation in 1721 was not only about the immunizing value of inoculation, but also about the danger of an inoculated case to other people. No one doubted that smallpox could be contracted by direct exposure to another case. Contagion, however, was not so readily apparent when there were epidemics of those diseases that we now know are spread by healthy carriers and when all the facts could not be readily explained the whole contagion theory was hastily abandoned. This accounts for the fact that the "throat distemper" was treated as a very strange disease and as one that did not spread by contact. The rapid progress of the epidemic can be partly attributed to this error in judgment, but the error itself was the result of other circumstances.

The interpretation of medical facts concerned the physician most of all and in this period all manner of men called themselves physi-First, there was the quack. He existed in eighteenth century New England just as he has existed in all other times and Perched upon a platform he extolled the virtues of his secret drug, while a two-piece band squeaked forth some simple tunes and a well-trained dog leaped through a paper hoop. cleverly managed to perform his cures in towns where there were no epidemics, so he can be neither praised nor blamed for anything that happened. Opposed to the quack was the physician who made an honest effort to improve both himself and his profession. the welfare of his patients at heart he studied his cases, listened with respect to the opinions and advice of others, and then fearlessly expressed his own conclusions. During this epidemic there was one such man in particular who stood above the others,-William Douglass, a Boston physician, wrote a detailed account of his experiences and in doing so made a valuable contribution to the existing medical literature of the world. The great majority of physicians, however, were of the country doctor type,-kindly, honest, diligent, respected. As there were no medical schools in this country, most of them acquired their skill in blistering, bleeding, and prescribing from preceptors, whose knowledge consisted chiefly of an intricate arrangement of the folk-lore of the times. The professional reputation of the doctor was measured by his ability to memorize a lot of ineffectual remedies or to control the dosage of a violent puke or purge, but he was sincere in his efforts and even if he stumbled while he went groping for the truth, he must be greatly admired for his undaunted courage in the face of many difficult tasks. When confronted with this epidemic of an apparently new disease he carried on against overwhelming odds, but partly because of inadequate training and partly because of misinterpretation of the facts, it was the country doctor who first decided that the disease was not contagious and who was, therefore, responsible in a large measure for the spread of the disease.

The best educated man in the New England town was the minister, who, spending many hours with the sick and dying, soon acquired the medical knowledge of the day and often applied it quite successfully. In towns where there were no physicians, the ministers tended bodies as well as souls, and during the "throat distemper" epidemic we find such men as Parson Smith of Falmouth, Hugh Adams of Durham, John Tucke of the Isles of Shoals, Nathaniel Williams of Boston, and Thomas Toucey of Newtown (Conn.) playing the double rôle. In fact, it was Jonathan Dickinson, a minister-physician, who wrote one of the best medical treatises on the "throat distemper." But even when the minister did not practice medicine, he was the acknowledged leader in the interpretation of extraordinary events, and when the people sought the explanation of anything unusual he seldom hesitated to expound upon the first causes of all things. To be sure, Cotton Mather was dead and a bit of liberalism had somewhat softened the fire-andbrimstone theories of an earlier day, but the people still gave a religious interpretation to every event of their daily lives and still considered each adversity as a just punishment for sin. During the many days of fast and prayer they humbly reflected upon the "especial Sins weh God is angry wth ye Land & with us for." One can find very little evidence of bitterness or complaint. As a natural result of a century of Puritanism there was no conflict between their theology and their science. When this epidemic began, science and theology agreed. Science failed, and when it could not adequately explain all the facts, the people turned to theology for assistance in their distress. But it was this readiness to adopt a theological explanation for the epidemic which was chiefly responsible for the hasty abandonment of a scientific one.

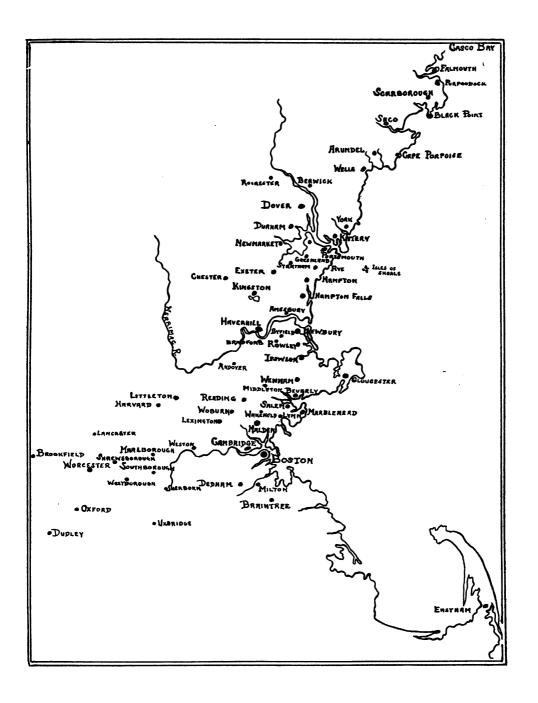
The ministers and physicians were factors in the spread of this disease in another way. They were in physical contact with the sick and carried the infection on their clothes and hands to their own families, at least, and probably all around the town. Doubtless some of them were healthy carriers. One of the very noticeable characteristics of the "throat distemper" epidemic is the frequent occurrence of many deaths in the families of the ministers and physicians.

Because this epidemic spread chiefly among the children, some aspects of their lives need to be considered. Since the middle of the

seventeenth century, the law had decreed that towns with more than fifty householders must provide for childhood education and by 1735, public schools were firmly established throughout New England. Schoolhouses were one-room buildings and during the winter months the children huddled about the open fire. Those whose parents contributed a share of wood were given the choice seats, but if the spread of an epidemic was in direct proportion to exposure, then the pupils who sat off in chilly corners by themselves were in somewhat less danger of contracting the disease. On Sundays, trailing their elders along the road or mounted with them upon a horse, the children went to church. They accompanied their parents to the church door, but a strict ritual demanded that within, the children must sit together at the rear or in the gallery. tithing man watched over them and attempted to prevent their restlessness and disorders during the two- or three-hour sermons. The unruly youngsters ran noisily up and down the stairs and in and out of church; occasionally they "sported and played, and by indecent Gestures and Wry Faces, caused laughter and misbehaviour in the Beholders, and thereby greatly disturbed the Congregation." After church there was again the temptation to play. The boys threw stones at the meeting-house windows and "profaned the Sabbath" in many other ways. The evidence indicates that the children, at least, did not wear long faces, but frequently played together, particularly on Sundays, when they undoubtedly contracted many of their contagious diseases.

Funeral ceremonies of colonial New England have been frequently described. We need not be concerned about the order of procession, the gifts of mourning rings and gloves, or the tolling of the bells, but reading between the lines we find some means by which a disease could spread. The funeral of a child was an occasion when all the playmates and younger relatives of the deceased were brought together. Children acted as bearers in the long march to the grave; they came into close contact with the corpse and no attempt was made to separate the healthy mourners from the other infected children of the afflicted family.

Thus a child's life on a solitary farm was not so isolated as one might at first suppose. The conditions were almost perfect for a contagious disease to spread, and when the "throat distemper" epidemic appeared in one of these old New England towns, its beginning was as explosive as it was malignant.



Ι

KINGSTON, NEW HAMPSHIRE

It makes me weep in sorrows deep, to hear the dying moans, Which Death has made, in these our Days, among our little Ones.

-A Lamentation.

Fifteen miles north of the Merrimac River and about the same distance from the coast is a little fresh water lake which has been known for a long time as "The Great Pond." Nearby lies the town of Kingston, famous in that part of New Hampshire as the ancestral home of Daniel Webster and the adopted home of Josiah Bartlett, physician, Governor of New Hampshire, and, according to tradition, the first to sign the Declaration of Independence. Even without any very unusual scenery Kingston, nevertheless, has the charm of a peaceful, sleepy, quaint New England town with its few old colonial homesteads set back from a road that encircles "Kingston Plaine," the shaded village green. Across the road, eastward from the green, is the old burying ground with its scattered groups of brown moss-covered stones. Some are overturned, others partly crumbled or buried in the earth, but their distinctive shapes, grimly smiling cherubs, and ornamental borders mark them as relics of early colonial days. Although most of them are difficult to read, an occasional inscription identifies these stones as marking the graves of children who died during an epidemic when Kingston was a thriving town on the western frontier of New England civilization.

About the middle of the seventeenth century when the English began to extend their frontiers inland, they found the Indians inhabiting the country surrounding "The Great Pond," for it was good hunting ground and the land was more fertile than was the sandy soil nearer to the coast. The early settlers met with prolonged and stubborn resistance from the natives, but by 1694 the country had become sufficiently populated to warrant a charter for a township which was to be called "Kingstowne" in honor of William of Orange, then King of England. After many rigorous winters and frequent raids by hostile tribes, the town began to thrive and by

¹ George H. Moses: The Road-Encircled Plain: A Sketch of Kingston. Granite Monthly, 1894, xvii, 351.

the time of George the Second about four or five hundred people had selected this region for their homes.

Among the eighty-one families of Kingston in 1725, the names of Bean, Clifford, Ladd, Prescot, Samborn, and Webster are found most frequently; some of them, direct descendants of the earliest settlers, had lived there for many years. The boundaries of the town were not well defined and included the greater part of the present Sandown, Danville, and East Kingston. By this time, the people had learned to face their hardships with resolute determination and had overcome many of the difficulties of earlier frontier They had no particular trade, but like other New Hampshire people raised their own livestock, barley, corn, and wheat; cut their own timber and brought it on ox-carts to the mill. The average family possessed a horse, four cows, and four or five hogs. down the pork in preparation for the long cold winter was as important as gathering the harvest in the fall, and so, to Bostonians, these people soon became known as "great pork eaters" which, after all, was not a very distinctive characteristic, for it was common to the inhabitants of most of the other inland New England towns. that time, Kingston was almost self-sufficient and an occasional "pedalar" or visiting relative was the only contact with the outside world. There were no wars or famines, the scene of Indian raids had shifted to the west and north, and, except for a perennial argument with their southern neighbors about the Massachusetts boundary-line, the people were as content and happy as the Puritan conscience would allow.

To this small group of sturdy, upright, farming people, the Rev. Ward Clark was called to be the minister when the church was organized in 1725.² Since his graduation from Harvard College (M.A., 1723), he had taught a grammar school in Exeter, his native town, a few miles to the north, but he was still only twenty-two when he undertook his new assignment and proudly entered in his book the names of his parishioners, headed by the Esquires, Captains, Ensigns, and Lieutenants. A leader in fostering community pride, he himself planted most of the elms that later shaded the village green. This kindly young man, able to interpret liberally a rigid Calvinistic doctrine, was devoted to his work and his efforts were soon rewarded with the admiration and respect of an apprecia-

² Rev. J. H. Mellish: Historical Address on the 150th Anniversary of the Kingston Congr. Church. 1876, 12.

tive congregation. Pleased with £80 a year, a home, and the prospects of a permanent settlement, he married Mary Frost of Kittery in 1727. During the first ten years of his ministry a new and larger meeting-house was built, for a hundred and thirty new members had joined the church and the population of the town had almost doubled, many of the new settlers coming from neighboring towns in northeastern Massachusetts. During the same period there were about eighty marriages and four hundred baptisms; Clark's salary was increased many times and he was granted liberal tracts of land. There had been a small epidemic of some childhood disease during the autumn and winter of 1730-31, but now the usual good health again prevailed and the minister and people of Kingston, with many of their earnest hopes fulfilled, looked forward to a tranquil and satisfying future.

Spring seems always late in coming to New England, but it was later than usual when it reached New Hampshire in 1735. said that the weather was uncomfortably wet and cold and that easterly winds prevailed. As the tradition goes, in April of that year, one of the hogs that belonged to a Mr. Clough was "taken sick with a complaint in its throat and died. Mr. Clough skinned the hog and opened it. Soon after, he was taken with a complaint in his throat, and died suddenly." But this is probably mere tradition, because there is no record of the death of Mr. Clough in 1735. However, on May 20, 1735, Parker Morgan, the son of John Morgan, died after a few days' sickness. About a week later, in a house four miles away, Nathaniel, John, and Elizabeth, the three children of Jeremiah Webster, died within three days. There was something unusual about the deaths of these four children, each with the same short illness. Some blamed the unseasonable weather; others knew it was a warning from an angry God; all agreed that it was very strange. The events of June are effectively told in the stark realism of the parish records:4

- June ye 5 Deborah Child of Josiah Batchelor Died
 - 7 Dorothy Daughter of Jacob Gilman Died
 - 17 Samuel Lock Lost a Daughter
 - 18 Ebenezer Sleeper Lost a son. Both died with a Quinsey
 - 19 Samuel Emons Eldest Daughter Died
 - 21 Died David son of Joseph Greely

⁸ J. Farmer and J. B. Moore: Collections, Topographical, Historical and Biographical relating principally to New Hampshire. 1822, i, 143.

⁴ Kingston Church Records: New Hampshire Geneal. Record, ii, 43; iii, 37.

- 23 Samuel Emons lost another
- 23 The Same Day Ebenezer Sleeper Lost another
- 25 Andrew Webster Lost his Child
- Joseph Bean lost one of His Children
- 27 Died another of Joseph Beans Children
- 28 Died Margaret Eldest Daughter of Joseph Bean
- 30 Samuel Emons Lost another Child

By the end of June the people were very much alarmed, for only once, in 1730, had the deaths for a whole year exceeded the deaths for this one month. This strange "Plague in the Throat" was not like any disease with which they were familiar. They knew that whooping-cough and measles could spread among children, but never had any such mortality accompanied a childhood epidemic. They could understand smallpox epidemics because that disease spread by contact, but this one attacked here and there "not according to the effects of contagion or qualities of the soil" and so was beyond their understanding. Soon it was certain that "God hath been provoked to visit this People with sore and grievous Calamities," so the young minister quickly summoned his afflicted people to fast and pray together.

Meanwhile, the disease had invaded many other homes and July only brought increased sorrows.

July ye 1rst Died Nathaniel youngest son of mr Jose Greely

- 4 Died Daniel son of John Huntoon
- 8 Died Isaac Son of Isaac Godfrey
- 10 Died William Another son of Isaac Godfrey
- 11 Died Nathaniel the Other son of Isaac Godfrey
- 11 Died Gideon son of John Yonng
- 14 Died a Daughter of Benjamin French
- 16 Rachel Died Daughter of Richard Tandy
- 17 Died Caleb Webster Brother of Jeremiah Webster
- 19 Died William ye Eldest son of William Smith
- 22 Died Mary Youngest Child of John Huntoon
- 26 John Webster Lost a Child
- 27 Died ye Wife of ye Revd Mr Ward Clark and her Infant
- 28 Died Moses ye son of Deacon Elkins
- 28 Ralph Plazdel Lost a Child
- 29 William Smith Lost an other Child
- 31 Jacob Flanders Lost a Child
- 31 Died Henery Youngest son of Deacon Elkins

There are no detailed accounts of those hot, distressing, summer days in Kingston. So far as known, nothing was done to prevent

the spread of the disease. If the first few cases had occurred in neighboring homes, perhaps the people would have suspected that the disease was spread by contact, but the first cases were four miles apart and the disease kept reappearing in widely separated sections of the town without any apparent reason, so it was decided that this "Strange unusual Distemper" was the "Fruit of strange Sins" and contagion was not thought to be a factor. Up to this time the remedies of Dr. Simeon Brown and Dr. Green had failed in every case. Bleeding, blistering, and purging had invariably hastened death and the long-tried and favorite remedies seemed to have suddenly lost their power. Only the "Tenders and Watchers" could soften the distress. In spite of the "Many Days of Fasting and Prayer that were observed in the Beginning of this fatal Calamity," the disease raged on through August:

• •	
August ye 1	Obediah Elkins Lost a Child
6	Obediah Elkins Ther other Child
7	William Buzzel Lost a Child
9	John Clifford Lost a Child
10	Eliz: Daughter of Samuel Colcord Died
11	Sam¹ Bean Lost a Child
11	Dr Brown lost a Child an Onely Daughter
11	Joseph Elkins Lost His Eldest Daughter
12	Died Ruth Daughter of Simon French
13	Sergt William Buzzel Lost another Child
14	Daniel Bean Lost a young Son
14	Joseph Elkins Lost Another of their Children
15	Joseph Elkins Lost Another of their Children
15	Jacob Flanders Lost another Child
16	Died Thomas Son of Jedidiah Philbrick
19	John Clifford Lost another son 14 years old
19	Joshua Prescut Lost a young daughter
21	Joshua Prescut Lost another
22	Joseph Elkins Lost his other Child
23	Died John Clark Son of ye Revd Mr Clark
23	Died a Son of Jonathan Samborn
26	Died Benjamin Clark Son of ye Revd Mr Clark
27	Robert Stockman Lost a Child
27	John Clifford Lost another
31	Samuel Bean Lost another a Daughter
31	Benjamin Sweat Lost His Eldest Child

⁵ Jabez Fitch: An Account of the Numbers that have died . . . within the Province of New Hampshire. Boston, 1736, 13.

In September, at last, it seemed that the prayers were answered. There were only six deaths compared with twenty-six in August, but in October there was another increase to fifteen, twelve of whom were children. With six deaths in November and eight more in December, the total stood one hundred and two for the year, whereas since records had been kept the yearly average had been less than ten.⁶ No detailed descriptions of the disease have been found, but written into the church records at the close of 1735 is this simple entry:

This Mortality was By a Kanker Quinsey or Peripn [eumony], which mostly Seized upon young People and has Proved Exceeding mortal in Several other Towns y^t It is supposed there never was y^e like Before in this Country.

Tradition says that many died within twelve hours and that others, while sitting up at play, would fall and expire with their play-

things in their hands.

KINGSTON.N.H.
-100
-1735
-80
-40
-20

Kingston, N. H., deaths, 1725-1744. Compiled in the town and left from records in the Coll. New Hamp. Hist.

Soc., 1837, v, 250.

Within a year one fam-

The epidemic continued through 1736, when there were thirty-four deaths including that of "Eliz. Clark y only Daughter of Rev^d M^r Clark" on August 29th. With twenty-four deaths in 1737 and sixteen in 1738, it was not until 1739 that the death-rate resumed average proportions. The epidemic had spent itself, but it had visited most of the families many of them childless. Within a year, one fam-

ily lost all four, another lost four out of six, and six families lost three each.8 Of the first forty who were taken sick, not a single

⁶ Ora Pearson: Mortality in Kingston from 1725 to 1832. Coll. N. Hamp. Hist. Soc. 1837, v, 250.

⁷ Farmer and Moore: loc. cit.

⁸ Jabez Fitch: An Account . . . etc. p. 5.

one recovered and more than a third of all the children in the town had died. Yet of all the affliction and distress in Kingston, no one suffered more than the minister, Ward Clark. He had fought adversity with an unfaltering sense of duty, but had lost his wife and four children, and all his efforts had ended in disaster. He could endure no more. Broken in health, he returned to his native Exeter, where he hoped to regain his strength under the care of Dr. Deane, a relative and practising physician. He drew up his will in which he remembered the poor and his "Beloved people of Kingston" and soon after, on May 6, 1737, at the age of thirty-four, he died of a "wasting consumption," probably some lingering complication of the disease.

II

NEW HAMPSHIRE

This strange Disease doth mostly seize those that are young and tender, And 'tis so smart, it strikes the Heart, and makes 'em to surrender.

-A Lamentation.

In 1735, most of the inhabitants of the Province of New Hampshire lived in the territory that lies between the Merrimac and Piscataqua Rivers and that extends inland for about twenty miles. A few of the fifteen or twenty towns were already about a century old, for very soon after the Pilgrims had landed at Plymouth there were settlements along the Piscataqua at the present sites of Dover and Portsmouth, and Exeter and Hampton were founded a little later by settlers from Massachusetts Bay. The other towns were relatively new, having sprung up during the early eighteenth century, chiefly as separated parishes of the older towns. It is a pleasant country, yet unspoiled by modern trade, and to one with any regard for the charms of the colonial period there are few more delightful places than old Portsmouth or the country-side along the "Kings Great Road" to Exeter.

When the news of the Kingston epidemic spread to the surrounding towns it is probable that many outsiders avoided Kingston,

⁹ William Douglass: The Practical History of a new Epidemical . . . Fever. Boston 1736, 1.

¹⁰ Mellish: loc. cit. says "nearly all of the young children."

for man generally fears an epidemic of disease, but after it was decided that the disease was not contagious it is also probable that many others went to Kingston to assist their unfortunate relatives and friends. We now know that some diseases are transmitted by healthy people as well as by direct contact with the sick, so with such a virulent and widespread focus as Kingston it might be expected that the disease would soon appear in the neighboring towns.

Today, Hampton Falls is fifteen miles east of Kingston, but in 1735, although the intervening country was already settled, they were adjoining towns. The present town of Kensington, which was established in 1737, was then the western part of Hampton Falls and East Kingston was separated from Kingston in 1738. The list of petitioners for the separation of East Kingston¹¹ includes the names of many families that lost children when the epidemic began, so that the disease had to spread only to a neighboring house in order to involve a family that attended church at Hampton Falls. In this way an entirely separate town could become infected. This was the probable course of events, because an epidemic started in Hampton Falls in June, a few weeks after the disease broke out in Kingston.

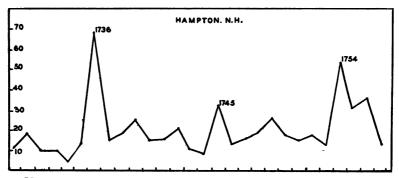
The Hampton Falls epidemic reached its peak during the winter months and during December alone there were fifty deaths. This town suffered more than any other in New Hampshire, and within about a year two hundred and ten had died, of whom two hundred were under twenty years of age. One family lost seven children, two families lost six, two lost five, six lost four, and about fourteen families lost three apiece. The disease was still present in 1739 when Joseph Batchelder lost twelve or thirteen children,—it was not known which,—for "Mrs. Batchelder afterwards was unable to decide whether she had twelve or thirteen children." It was also said that only two houses where there were children escaped the epidemic. 18

¹¹ New Hampshire Town Papers. Edited by I. W. Hammond. Concord, 1884, xii, 334.

¹² Jabez Fitch: An Account . . . pp. 2-6. Unless otherwise indicated, New Hampshire statistics have been taken from this source.

¹⁸ Warren Brown: *Hist. of Hampton Falls*, 301. According to the *Boston News-Letter*, however, (Mar. 28-April 5, 1739), Joseph Batchelder lost six children.

Hampton Falls, then a town of about two hundred houses and twelve hundred people, had been separated from the old town of Hampton in 1726. It had grown more rapidly and become more of a trade center than Kingston, since it was on the main road that led through New Hampshire southward to Salisbury and Newbury in the province of Massachusetts Bay. A fair, which attracted people from neighboring towns, was held at the Falls two or three times a year and travellers on their way to Maine often stopped at the inn and mingled with the people of the town, so when Hampton Falls became a second focus there was an opportunity for the disease to spread even beyond the borders of the province.



Hampton, N. H., deaths, 1730-1757. Recurrences of "Throat distemper." Compiled from records in Belknap: Hist. New Hamp., iii, 178; New Engl. Hist. & Geneal. Reg., 1904, Iviii, 29.

In contrast to Hampton Falls, the first parish of Hampton, which was north of Taylor River and contained the same number of people, had only fifty-five deaths from the distemper within the first year and about eighty for the years 1735-37. The Hampton church records contain a brief first-hand account of the disease:

July ye 26, 1735 on Saterday my Brother Samuels daughter abigil was taken ill with a mortal distemper: the tuesday following which was the 28 day of July his only son Sam¹¹ was taken with the same awfull illness they continued till Saterday and both died: august ye 2nd abigil early in ye morning and Sam¹¹ early that evening they were lovely in their life and in their death they were not devided: they were decently buried in one grave on monday aug 4th and on tuesday morning his daughter Elisabeth died after about three days after she was taken with the same distemper the distemper dreadfully siezed their throat in an awfull manner.¹⁴

¹⁴ New Engl. Hist. & Geneal. Reg., 1904, lviii, 31.

By August, 1735, the disease had spread to Exeter, six miles to the north, and another conflagration burned with all its devastating fury. Within a year there were one hundred and twenty-seven deaths, all but nine among children under fifteen years of age. Exeter was an older and much larger town than Kingston and, although it appears that the epidemic was not as extensive in proportion to the population, the disease was just as mortal in the particular homes where it occurred. With utter disrespect for the remedies of those days it even crossed the threshold of the home of Dr. Deane, the chief physician of the town: 15

Deborah	Deane	died	Sept.	6	1735
Sarah	"	"	"	15	"
Abigail	"	"	"	18	"
Mary	"	"	"	19	"

Stratham, Greenland, and Newmarket, small towns near Exeter, each had about twenty deaths.¹⁶

In September the disease broke out in Durham, and within a few months another hundred deaths was added to the rapidly growing list. Now up to this time the cause of the epidemic had remained obscure and even the doctors who were supposed to know all about such things were forced to admit that they were helpless. According to a contemporary poem:

The Doctor's Art, can find no part, nor Cure for this Distemper; By Physick long, nor Cordials strong, they cannot find the Center.

It is unknown to any one and all the Doctors skill,

To cure this Plague, or to engage to cure it at their will.

They're in the dark, in every part, and cannot find it out, From whence it strikes, and where it lights they cannot point it out.

If we should call the Doctors all and let them all engage, We cannot find in any kind that they can cure this Plague.

¹⁵ Ibid: 1883, xxxvii, 289.

¹⁶ For the 1742 recurrences of the epidemic in Greenland and Stratham, see: New Engl. Hist. & Geneal. Reg., xxix, 38; xxx, 427; xxxii, 48.



ELEGY

Upon the much lamented DEATHS of avo-defireable Brothers, the two eldest Sons of

Capt. Joshua and Mrs. Comfort Weeks,

Of Greenland;

Who departed this Life in February 1735,6. the youngest whose Name was Jebabod, died the 3d Day, in the 22d Year of his Age, and the eldest whose Name was Jebabod, deceased the 10th Day, in the 24th Year of his Age, leaving his honoured Parents and a defirable Widow with other near Relations in mountful Tests. Let us all that are yet spared, improve this and the many other Warnings that we have had in the Year past, remembring the Command of CHRIST is, Be ye also ready.

Bipecked Friends, my heart is griev'd That of your Sons you are Beseav'd! But pray don't be Difconfolate, Athlo your Lob is very great: But with GOD's Dealings be content, Knowing your Children were but lent. GOD Righteous is in calling home, Thofe Comforts which from him did come. GOD often has unto us fhown, That He has Frower to take his own, When young and fmail or when up-grown. Tis Comfort, your's did live fo long, I toul GOD did their Souls remove, For to enjoy their Saviour's love. Then if your lofs, to them be gain, I pray take care not to complain. But thankful be, that GOD has given Such hopes, your Sons are gone to Heaven. What greater Comfort can you have, Than hopes that GOD their Souls did face. Soely this may your Comfort be, That they from failings were for fee. And that by GOD they were inclin'd, their own immortal Souls to mind. Their many years I have them known, Good Inclinations they have fhown. This plainly flow'd what was their Care, Their daily uting Secret Prayer. And practifuing fuch feeredly, I truit was true finceetly, I truit was true finceetly, I truit was true finceetly, I pray it may your Comfort be, What in your Sons you did often fee; That they heave the henderly in the form of the fine soul, they fine of them for the fine to their Praife we may it tell. They frew of themfelves fo well, That to their Praife we may it tell. They were to Parents Duiffel, And each was thoughtful of his Soul. They fine of them they on their Death-bed lay, They did moft readily obey. They were two kind and loving Brothers, More than is common among others. What grieved one, grieved the other's Heart, They did moft readily obey. They were two kind and loving Brothers, More than is common among others. What grieved one, grieved the other's Heart, They did moft readily obey. They dere two kind and loving Brothers, More than is common among others. What grieved one, grieved the other's Heart, They did moft readily obey. They dere two kind and loving Brothers, More than is common among others. What grie

band in the Year past, remembring the Command the Command of Losses for he had his Part;
For one he giev'd hefore 'twas dead;
But when he found Death was GOD's Will,
He did sobmit with Silence fail!
But David after moused more,
The Aggravation being fore,
Havington The stoff him at all,
Who did in his Recordina fall.
Such Cause to mourn you cannot have,
Because you have Hopes beyond the Grave.
Consider too whom GOD did call
A perfect Man, and yet loft all,
And in his Lofs did bles the Lord,
As is recorded in his Word.
Pray imitate such bless the Lord,
As is recorded in his Word.
Pray imitate such bless the Lord,
As well becomes GOD's own Elect.
My Friend, who now art lonetome left,
Being of your bosom Felend bereft,
I pray don't be discourged,
Your GOD fill lives, ho' Husband dead:
Cleave close to him who does coreed,
An decay to him who furely can,
Your GOD fill lives, ho' Husband dead:
Cleave close to him who furely can,
Your GOD fill lives, ho' Husband dead:
Cleave close to him who furely can,
You comfort more than any Man:
Take Comfort in GOD's Promise
Made unto Widows risk are his.
Will GOD to you a Husband be
Who can you formal! Troubles free
What can a greater Comfort be?
Are not GOD's Promise now more
To you han e'er they were before?
Then now go on and serve the Lord,
And he will have your Wants supply d.
Brochers and Sisters that remain,
Pay by shis Lofs, your Souls may gain.
Your Brothers Comfels left behind,
Do not forge, but always mind;
And of your houls be fure take case.
And daily feek to the story is the Ground with the case.
That he for Heav.
Your Saviour frive
More than on Early
You

Now let us fet by Earth more light,
And feek Heaven with all our Might;
And not to fet our Hearts upon,
Earth's Conforts, which may foon be gone
You fee what GOD hath lately done,
Improve it well, pray every one,
And now GOD's Will is done, tis fit,
That you with Silence all fubmit,
And not to mourn with great Excel,
Left thatGOD's Law you fhould transferis;
And yet we most fuch Notice take,
That we may right Improvement make,
Remembring 'tis a Warning given,
To wean from Earth and fit for Heaven.
Don't GOD to us now loudly fay,
Make ready for your dying Day.
You fee that Life uncertain is,
Day grous for to delay it is.
The Call to all now feems to me,
See that you also ready be.
Such Calls then don't let us defpile,
But for our Souls learn to be wife;
And prepare for Eternity,
Knowing we all must furely die.
GOD does fometimes our Branches take,
Then let us firive more Fruit to bear,
When we by GOD fo pruned are.
GOD fonetimes bring Affictions
Upon his Daughters and his Sons,
To fhow them the Uncertainty,
Of all fuch Comforts as must die;
That they on Him might fet their Love,
And on those Things that are above
Which only will true Comfort yield,
When Streams of earthly Comforts dry,
Let us unto the Fountain fly,
When Streams of earthly Comforts dry,
Let us unto the Fountain fly,
When Streams of earthly Comforts dry,
Let us unto the Fountain fly,
When we under Affilctions are.
Fo you that do in Greanland live,
GOD does this awful Warning give;
To others all in ev'gy Town,
By Youths and Children foon cut down
GOD does unto us often call,
Per to forfake our Evils all,
And specially without Delay
Prepare for the great Judgment-Day.
For all a fits? Account must give,
Happiness or destributed in the proper service of the gring had prepare for the great Judgment-Day.
For all a fits? Account must give,
Happiness or destributed they live,
And have Reward accordingly,
Of Happiness or destributed without Delay

There was one man in Durham, however, who could explain this mysterious disease. Hugh Adams, "Clerk, the Gospel Minister and Pastor of the Church at Durham" was a graduate of Harvard College (1697) and had combined the practice of medicine with his preaching in many towns before he contracted with the Durham parish for his "ministerial labours." Soon afterwards the currency became inflated and the Durham people, unlike the people in other towns, made no effort to please their minister with regular increases in salary, for the simple reason, as it later became apparent, that they didn't enjoy his preaching and they sometimes even went so far as to withhold his salary altogether. Bitterly complaining about this "sacrilegious fraud" and at the same time proving that he was gifted with extraordinary powers, Adams finally petitioned the Governor and General Court. He stated that on one occasion when his arguments about his salary had not produced results, he had prayed that it would not rain, and, very probably to his own surprise, there was not a drop of rain for three months! Then a few remaining friends protested that they were innocent victims and that their own crops were nearly destroyed, so Adams obligingly reconsidered and declared a private fast when for a full day he "abstained three meals from eating, drinking and smoaking anything." Immediately, there were "repeated plentiful and warm rains, as recovered the languishing corn, grass and fruits of the trees, unto a considerable harvest thereof; so as was then remarkable..." Furthermore, according to the petition, good ministers were appreciated in Massachusetts and the laws of that province demanded that they should be promptly and adequately paid, but there were no such laws in New Hampshire. No wonder, Adams said, that an epidemic was raging in New Hampshire while Massachusetts was relatively free.17 The poem continues:

> Let's search the Cause, 'tis breach of Laws, that punishes for Sin, That brings down Plagues in every Age, as it has ever been.

Ungrateful Sins have ever been most odious in GOD's Sight,
Then let's repent with one consent, and pray both Day and Night. 18

¹⁷ Belknap: Hist. of New Hamp., 111: 263.

¹⁸ A Lamentation.

Beyond Durham, the road to the north leads into Dover, where the sickness began in October, 1735, and caused eighty-eight deaths before the following July. In March, 1736, the Boston News Letter reported: "Last Saturday four Children lay dead in one House at Dover, who died of this mortal Sickness." At another time four other children of one family were buried in the same grave and there were two or more deaths in many families throughout that winter and spring. The epidemic even reached the small remote settlement at Rochester, where Nathaniel Ham and his brother, the first two children born in the town, died of "throat distemper" and were buried in the same grave. 19

Chester was a small town of about four hundred people out in the "Chestnut Country" west of Kingston, and during 1735-36, although there were only twenty deaths, considerable attention was given to the Chester phase of the epidemic. It was supposed that a contagious disease would spread rapidly in all directions. From Kingston, this disease had spread to Hampton Falls on the east by June, to Exeter on the north by August, but it was not until October that it reached Chester on the west. That puzzled everyone and together with the strange behaviour of the disease in other towns the evidence now seemed convincing that this disease was not con-If the people had considered other facts they would have found some evidence that it was, because the epidemic could be seen spreading to the north at a definite rate per day. Starting from Kingston in June, it reached Exeter in August, then ten miles north to Durham in September, and then ten miles further north to Dover in October. But they repeatedly overlooked such facts and emphasized exceptions. Throughout the subsequent history of the epidemic the contagion theory occasionally reappears, but every time that it does some contrary evidence arises to overthrow it.

Portsmouth, with about three or four thousand people, was the cultural, financial, and governmental center of New Hampshire. Most of the provincial trade with foreign countries passed through this town and there was frequent contact with the people in neighboring towns, so it is surprising, therefore, to find that Portsmouth escaped the epidemic until nearly all the other towns had become infected. In a sermon preached during the winter of 1735-36, 20 it

¹⁹ McDuffie: Hist. of Rochester, 44.

²⁰ Jabez Fitch: Two Sermons on the . . . Fatal Distemper. Boston, 1736, 10.

was said that the mortal sickness, though present, did not prevail to the same extent as in other towns; and it was not until January that a Portsmouth epidemic was first mentioned in the contemporary press. On February 9, the Boston Evening Post reported:

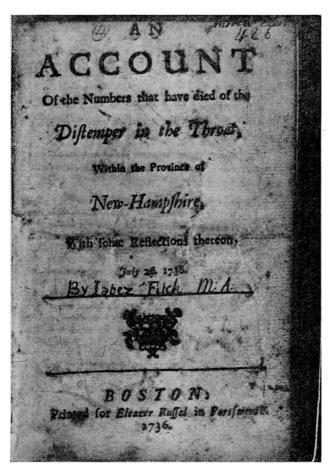
We are informed, that 7 Children died at Portsmouth the last Week, and that 3 children of Mr. Thomas Bickford of that Place, and which were all that he had, were buried together on Wednesday last.

Subsequently, very conflicting accounts appeared. In March, the Boston News-Letter mentioned that the epidemic had been "pretty favourable at Portsmouth hitherto," but later that month it was as "mortal as in any of the neighboring Towns" and seventy had died within a short time. By April the epidemic had "considerably abated," but by July the number of deaths had reached one hundred. There was a pest-house in Portsmouth at this time and in 1736 the provincial government allowed an increased appropriation for its maintenance. 21 Here is indirect evidence that Portsmouth physicians may have treated the distemper as a contagious disease and, if it is supposed that the first few cases were immediately isolated, the small number of deaths during 1735 can possibly be explained. But it does not seem that a single pest-house could have been effective for very long because it would surely have been overtaxed with the seventy fatal cases during the late winter, so it is probable that the isolation treatment in Portsmouth was ineffectual. Certainly it cannot explain the fact that, in proportion to the population, Portsmouth had fewer deaths than any other New Hampshire town.

Jabez Fitch (1672-1746), the minister at the North Church in Portsmouth, wrote a valuable account of the New Hampshire epidemic. Born in Norwich, Connecticut, the fourth son of the Rev. James Fitch, he attended Harvard College (1694) and was a tutor and a fellow there. A few years at Ipswich was followed by "a pious and useful ministry of more than twenty years continuance" in Portsmouth, where he died of a "nervous fever" in 1746. Fitch had been impressed by the epidemic and went to most of the neighboring towns to gather mortality statistics. Although

²¹ New Hampshire Provincial Papers. 1722-1737, iv, 723. Edited by N. Bouton.

published as a theological work, An Account of the Numbers that have died of the Distemper in the Throat, Within the Province of New Hampshire is a commendable piece of scientific research and is



(Courtesy of the Boston Athenæum.)

of great value to epidemiology, for it not only gives the total numbers that died in the various towns but the deaths grouped according to age. eighteenth tury medical publications one usually has to allow for errors in interpretation, but these statistics are reliable because there could have been very little chance for error in recording a child's age at the time of death. Naturally, Fitch was interested in a theological interpretation of his figures and when he found that the disease vented its

fury chiefly upon the children he attributed it to "the woful Effects of Original Sin." We need not be concerned with the religious aspect of this work, but we will have further occasion to refer to the statistics.

Towns	Under 10	10 to 20	Over 20	Total
Portsmouth	81	15	3	99
Dover	77	8	3	88
Hampton	37	8	10	55
Hampton Falls	160	40	10	210
Exeter	105	18	4	127
Newcastle	11			11
Gosport	34	2	1	37
Rye		10		44
Greenland		2	3	18
Newington	16	5		21
Newmarket	20	1	1	22
Stratham	18			18
Kingston	96	15	2	113
Durham	79	15	6	100
Chester	21			21

802(81.5%) 139(14.1%) 43(4.3%) 984

Deaths in New Hampshire, modified from Belknap's compilation of Fitch's statistics.²² As there were very few deaths in June, 1735 (13 in Kingston and a few more in Hampton Falls), and as the "Account" probably went to press early in July, 1736, I have taken these figures to be the approximate number of deaths for the first year of the epidemic (-July 1, 1735-July 1, 1736). In addition to Fitch's figures, the newspapers²³ reported that "several" died at Derry and Nottingham.

The "Account of the Numbers . . ." was published July 26, 1736, and many, especially local, historians have accepted the figures as complete. But when Fitch wrote, the epidemic was not over, indeed, one month later the Boston News-Letter²⁴ reported: "The Distemper is yet very bad at Portsmouth and many dye of it. It is attended with a violent fever." The records of various churches, while they do not mention the exact cause of death, indicate that the distemper was still prevalent after Fitch's work was printed. For instance, in Rye, just south of Portsmouth, Abner, Jacob, Mary, and Tryfenny Lock all died in July-August 1736.²⁵ At least fifty died in the course of a year in this parish of three hundred souls.

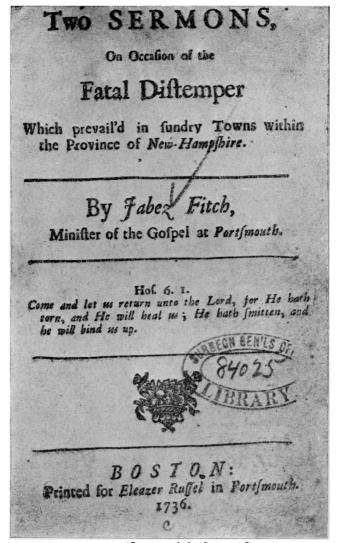
²² J. Belknap: Hist. of New Hamp., ii, 94.

²³ Boston Evening Post, Feb. 16, 1736; New York Gazette, March 6-15, 1735/6. Deaths in New Hampshire estimated at 600 up to Jan. 30, 1736. Statistics for various towns given.

²⁴ August 26-Sept. 2, 1736.

²⁵ New Hamp. Geneal. Record. July, 1903, i, 43. Multiple deaths in the Berry, Doust, Goss, and Marden families also.

There are records of the epidemic at Newcastle, an island at the mouth of the Piscataqua River, and even among a small,



(Courtesy of the Surgeon General's Library.)

isolated colony of fishermen on the wind-swept Isles of Shoals, eight miles at sea, thirty-six children died of the distemper during the winter and spring of 1735-36.

III

MAINE

To Newbury O go and see
To Hampton and Kingston
To York likewise and Kittery
Behold what God hath done.

-Awakening Calls to Early Piety.

Maine was a part of Massachusetts Bay Province at that time, but for convenience the Maine towns are treated as a separate group. Most of them were small fishing towns at occasional harbors between the Piscataqua River and Casco Bay and their total population was less than nine thousand.

The epidemic began in Kittery in June, 1735, which was very soon after it began in Kingston, but this could not have been a direct spread across the Piscataqua River from the vicinity of Portsmouth for the epidemic had not yet reached that region. The appearance of the disease in Kittery, as in Chester and other places, was difficult to explain and such unusual events made Jabez Fitch decide:

The Progress of the late Distemper has been very strange in its passing from one Town to another, after a considerable space of Time, and in its long remaining in one Part of a Town, before it has pass'd into other parts, and in its returning where it seem'd to be quite gone, and the Fears of it were blown over; on these Accounts the Act of Providence is the more visible in sending it, and we are led to look beyond natural Causes to the Hand of God, to whom we are chiefly concern'd to apply our selves for the Removal of this awful Calamity.

History does not say that "Vice, Pride, Envy, Malice & Evil-Speakings" were any more common in Kittery than elsewhere, so modern science attempts to explain this mystery in some other way. There could easily have been some direct connection between Kittery and Kingston. Ward Clark's wife (Mary Frost) came from Kittery, his brother had lived in Kittery and there were probably other families with equally close connections. During the exciting times in June, some friend or relative may have gone to Kingston, contracted the disease in a mild form and then returned. Although in apparent good health, that person could still harbor the disease. Or, some person in Kingston may have gone to Kittery and become sick a few days after his arrival. Later we shall find a specific instance in which the disease was carried to Boston in this manner.

Again, our knowledge of the healthy carrier can account for the apparent mystery without any reference to Kingston, for the disease may have been carried to Kittery from Hampton Falls where an epidemic also began in June. A traveller on his way from Boston to Maine may have become infected as he stopped to rest and gossip at the Hampton Falls Inn, and a day or two later, as the people of Kittery gathered around him for news of the distemper, the very germ that caused it might have been disseminated with every word. It is no wonder that the progress of the epidemic seemed so strange.

The news that Kittery was involved spread up the coast and each town prepared to defend itself. Parson Smith of Falmouth wrote in his journal:

Oct. 31, 1735. We had a Fast . . . on account of the sickness which broke out at Kingstón, N. H., and which is got as far as Cape Porpoise, and carries off a great many children and young persons and alarms the whole country.²⁶

That same month other fasts were held at York²⁷ and Berwick²⁸ to prevent the spread of the disease, but the fasts were answered "by terrible things in Righteousness" and the settlements at Spruce Creek,²⁹ York, and Wells³⁰ soon became involved. From the reports it cannot be determined when the epidemic appeared in the various towns, but there are records of it at Arundel (Kennebunk),³¹ Cape Porpoise, Saco, Black Point (Prout's Neck), Scarborough,³² Purpoodock (Cape Elizabeth and South Portland),³³ Falmouth

²⁶ Journal of the Rev. Thomas Smith, Portland, 1894. Contains brief references to the epidemic in various Maine towns.

²⁷ C. E. Banks: *Hist. of York*, Boston, 1931, i, 354, 367. *Boston News-Letter*, March 11-18, 1736. The Rev. Mr. Moody is supposed to have written an account of the epidemic in York. (Mentioned in John Brown's *Relation*. 1737.)

²⁸ J. C. Scates: Records of the First Church of Berwick. N. E. Hist. & Geneal. Reg., 1928, lxxxii, 97.

²⁹ Boston News-Letter, March 11-18, 1736.

³⁰ E. E. Bourne: Hist. of Wells & Kennebunk, p. 351.

⁸¹ Boston News-Letter, Jan. 22-27, 1737. New Eng. Hist. & Geneal. Reg., 1889, liii, 123. George March of Kennebunkport "lost seven children in one week." Seven children of Joseph Averell and of Jane McLellan, his wife, died in 1735. The Averell Family, p. 170.

³² Boston News-Letter, Jan. 22-27, 1737. "Not one has lived that has had it of late"—Smith.

⁸⁸ 26 deaths before May 1737,—Smith. The Rev. Benjamin Allen lost five children within a week.

(Portland),³⁴ Casco Bay,³⁵ Presumscot Falls, North Yarmouth,³⁶ and Pemaquid.³⁷

The epidemic continued for many months. June 16, 1736, was a day of fasting and prayer at the First Church in Falmouth on account of "the terrible distemper that has been and is still prevailing in the land." Practically all of the parishioners were present and it was an unusually solemn affair. Parson Smith, physician as well as minister, made frequent notes in his journal about those days of sickness and mentions that the epidemic was still present in 1737 and 1738. No first-hand descriptions of the Maine disease have been found. At Scarborough there were times when the mortality approached one hundred per cent. It has been estimated that there were five hundred deaths in Maine, 38 which is probably not an exaggerated estimate in view of the more than one hundred and twenty-five deaths in Kittery alone. 39

IV

BOSTON

But not to go so far, the daily 'counts we hear, Are 'nough to fill a thinking Soul with trembling Dread and Fear.

-Earnest Expostulation.

Late in the summer of 1735, the disease that had "as yet no proper Name assign'd to it" invaded the northern part of Massa-

^{34 40} deaths before May 1737,—Smith.

³⁵ Boston News-Letter, March 11-18, 1736.

³⁶ Including Freeport and Harpswell. Lydia Tuttle d. Dec. 7, 1736—"The first by throat distemper." Multiple deaths in the Anderson, Brown, Burnell, Fogg, Ingersol, Larrabee, Seabury, Weare, and Winslow families. *Ms. Record of Deaths*, in Maine Hist. Soc.; *Old Times in North Yarmouth*. Jan. 1884, p. 1105. According to Smith's *Journal* there were 75 deaths before May, 1737. I have been unable to locate: "A Poem on the Death of Martha Chandler of North Yarmouth," a broadside, Boston, 1737. She died in August, 1737, probably from the "throat distemper."

³⁷ William Douglass—Practical History . . . p. 13. Virginia Gazette, Apr. 28-May 5, 1738.

³⁸ Williamson: Hist. of the State of Maine. 1832, ii, 186.

³⁹ Fitch: An Account ... p. 6. Boston Evening Post, Nov. 24, 1735.—"the Distemper still prevails at Kittery, &c, and a Child of Col. Pepperil's about 3 Years old, died of it last Friday."

chusetts. By this time a large part of New Hampshire was infected and, as there were no quarantine restrictions, the disease could be carried into Massachusetts by countless travellers going to many different towns. As a matter of fact, the epidemic appeared in various Massachusetts towns at different times and its exact course cannot be traced in geographical or chronological sequence. Moreover, the descriptions of the Massachusetts cases differ in some important particulars from the case descriptions in New Hampshire so that, on the whole, the Massachusetts epidemic seems very complicated and for a correct interpretation of the contemporary records it is first necessary to establish the diagnosis. There are clear and accurate accounts of the disease as it appeared in Boston, therefore it is more profitable to describe the situation there and defer the histories of the intervening towns.

There had been rumors in Boston about the strange and mortal "Eastern Distemper," but there was no alarm while it remained so far away. Late in September, however, when the epidemic had actually crossed the Merrimac River, it seemed that Boston would inevitably become infected and the selectmen became very much disturbed. Boston had just recovered from a serious smallpox epidemic which occurred five years before, trade was good and the general health was better than it had been for many years, so the selectmen were determined that if possible they would avoid another siege of sickness at this time. Consequently, they invited the leading physicians to their council meeting on October 1, for it was earnestly desired to have an intelligent discussion of this disease and to consider some effective means to check its spread. This consultation was of singular importance, for it was this group of physicians, called together to protect the public from the ravages of the "throat distemper," who organized the first medical society in America. To the joint meeting in the Council Chamber they invited Dr. Simon Tufts, a leading physician of Medford and the surrounding country and whose practice extended as far as Haverhill and Newbury. Since the epidemic had already reached Newbury, Tufts could relate his own experiences and the information that he had received from the physicians who practised there. His Boston audience was undoubtedly amazed by the many astounding facts that he could tell about this new disease. There was that mysterious appearance in Kingston in homes four miles apart; there were other outbreaks in various places when there were no apparent con-

tacts; the uncontrolled progress, the violent symptoms, and the unusually high mortality surely must have made his story all the more impressive. It was a time for very serious thought, because a dangerous enemy was about to attack the metropolis of New England. Perhaps this impending danger may have caused some uneasiness, but it did not cause despair for the Boston people had great confidence in their own physicians, and, as it later became quite evident, the physicians had no mean opinion of themselves. For some time they had secretly suspected that the "Eastern Distemper" had been so deadly only because the small town physicians, with limited training and experience, had neither recognized the disease nor prescribed the proper treatment. Thus they welcomed this opportunity to try the correct procedures, but after prolonged and thoughtful consideration of all the evidence and various defensive plans they were able to agree upon only one important point:— "That the said Distemper was communicated by means of a bad Air and not by Contagion." Of this, they were absolutely certain. There was hardly time to inform the people of this significant fact when great excitement prevailed among the physicians and fathers of the town. Within a week a serious situation had developed.

While the meeting was in progress, indeed, at the very moment when the "bad Air" theory was announced, a young man named How was on his way from Exeter to Boston. He was returning home to tell his widowed mother that during the recent Exeter epidemic a brother had been fatally stricken with a "Distemper in the Throat." A few days after he arrived at his home on Orange Street in the south end of the town he, too, complained of a sore throat and the famous Dr. Zabdiel Boylston was immediately con-Boylston recognized the dread disease at once, prescribed the customary pukes and purges, and proceeded to let some blood, but it appears from the records that for some unknown reason he failed to report the case. Some years before this, Boylston had been engaged in a heated controversy with most of his professional brethren and perhaps at this time he had no desire to cooperate in their plans or perhaps he thought that if the disease was not contagious then it was of no concern to others. Now, it was customary at that time "to watch o'er ourselves and one another," and somehow the Rev. Dr. Nathaniel Williams heard the news and immediately informed the selectmen of what was going on. Boylston was requested to appear at once and he then reluctantly admitted

that his patient had the same horrible disease that had been causing so much trouble in New Hampshire. That was all the selectmen wished to know and with that information they hastened to Justices Anthony Stoddard and Samuel Sewall and asked for a warrant to remove this patient to a pest-house on Spectacle Island.

It is not quite clear why they wanted to isolate the patient if the disease was not contagious, unless there were some doubts about the "bad Air" theory and an island seemed the safest place to test it out, but nevertheless they wanted him moved, and they wanted him moved quickly. The slightly bewildered justices, not appreciating the need for haste, advised the selectmen first to renovate the hospital and make it more comfortable for the reception of the sick. Obviously irritated by this delay, the selectmen went on with their plans with the utmost possible speed and dispatched "A Carpenter, a glazier and other hands" down to the island to complete the reconstruction. Meanwhile, arrangements were made with Dr. Hugh Kennedy to be resident physician and to care for all the patients who were expected to be quarantined. Within twenty-four hours from the time that Boylston's case was first reported, detailed preparations had been made for a serious and extensive epidemic. But in the best laid plans of the selectmen one very important item had been overlooked, for it seems that the request for a warrant was based upon a law that concerned only contagious cases and the physicians had already definitely stated that the distemper was not that kind of a disease. Dr. Boylston readily admitted that it was a serious disease, but at the same time insisted that his patient was not dangerous to others and at the last moment he refused to let him go. The worried selectmen, not yet convinced, decided to try other schemes and that same day they sent a committee consisting of John Jeffries Esq., Capt. Jonathan Armitage, and Capt. Forsyth to call on the widow How. They discussed the advantages of the hospital, stressed the dangers of an epidemic, and urged the widow to consider the other people in the town. These arguments proved ineffective, for the mother's love for her son was greater than her interest in the public health. She very decidedly refused, indeed, she defiantly told them that they could go and "Rase the Foundations of her House, before She would Suffer it." The selectmen. not anticipating all these obstacles to their plans, became more and more provoked and asked for a second warrant to break down the doors and forcibly remove the patient. The justices refused.

affair was brought to the attention of the Governor and Council who were unwilling to interfere and prudently referred the selectmen back to the justices of the peace. For the third and last time a warrant was requested. This time it would be granted, provided the physicians would only admit that the disease was spread by contact, but the physicians, of course, would agree to no such thing. So the selectmen, deciding upon a plan that did not require a warrant, "Ordered proper Persons to keep a Strict Watch at the said House, until further Order, to prevent any Communication with the same." Just as the controversy was concluded to the satisfaction of the contending parties, the patient died.⁴⁰

It may have been the "watch" or an insufficient amount of "bad Air" or the state of grace in Boston or just pure good luck, but at any rate "No infection was observed to spread or catch in that Quarter of the Town." Meanwhile, during all the excitement about the warrants, some alarming rumors had reached the country towns that "Several Families" in Boston were suffering from the distemper, and the selectmen had then to worry about the effect upon the country trade. So they advertised in the newspapers on October 23, that such reports were exaggerated and groundless "And That it is, thro' the Goodness of God, as healthy a Time as has been known for many years past." This reassuring statement, however, no sooner appeared in print than an epidemic was discovered in many sections of the town. It had quietly begun the previous August, away up in the north end, and had made slow but steady progress during the succeeding months. The first cases had:

... white specks in the Throat, and a cutaneous efflorescence: A few more in the same Neighbourhood were seized in like manner, about the same time. Towards the end of September it appeared in several parts of the Town, with a complaint of soreness in the Throat, Tonsils swelled and speckt, Uvula relaxed, slight Fever, flush in the Face, and an Erysipelas like efflorescence on the neck, chest and extremities; but being of no fatal or bad consequence, nothing more than a common cold was suspected.⁴²

⁴⁰ Report of the Record Commissioners of the City of Boston containing the Records of the Boston Selectmen, 1716-1736. Boston, 1885, 279 et seq. The patient was probably Israel Howe (Israel³, Israel², Abraham¹) b. Feb. 17, 1719; d. Oct. 10, 1735. (Howe Genealogies.)

⁴¹ Boston News-Letter, Oct. 16-23, 1735.

⁴² William Douglass: Practical History . . . etc. Boston, 1736, 2.

At first the disease attracted very little attention, but by November it had become more prevalent and some of the patients died, with signs and symptoms that were somewhat similar to those observed in the How case. It then dawned upon the physicians that the dreadful "throat distemper" had actually invaded the town. Meanwhile, no new cases were seen in the vicinity of Orange Street, so the watch system of isolation was abandoned and other events seemed to confirm the previous opinion that the disease was caused by "some occult Quality in the Air." As winter approached it became readily apparent that a sizable epidemic was at hand and nothing could have helped more to spread the alarm than a doleful broadside which appeared about this time. "

A Lamentation

On the prevailing Sickness, in many Towsn in New-England, with an earnest Call to Young and Old, to turn from Sin, and to seek GOD's Face and Favour.

Both Young and Old, come mourn with me, with bitter Lamentation,
Here is a Call from CHRIST above,
to th' rising Generation.

For GOD above, in Righteousness, an Angel sent with Power, Who with a Sword already drawn our Children to devour.

GOD smitten hath with sore Plagues, our Children young and small, Which makes me weep exceedingly, and on CHRIST's Name to call.

This mortal Plague doth much enrage, among our little Bands, And sudden Death doth stop the Breath of these our little Lambs.

⁴⁸ Broadside in the Mass. Hist. Soc. Although undated, the internal evidence places it about 1735-6.

A Lamentation

On the prevailing Sickness, in many Towsn in New England, with an carnetic Call to Young and Old, to turn from Sin, and to feek GOD's Face and Favour.

BOTH Young and Old, come moun with me, if we should call the Doctors all and let them all engage, we cannot find in any kind that they can care this Plague.

For GOD above, in Righteouines, an Angel sent with Power, Who with a Sword already drawn our Children to devour.

It makes my very Heart to bleed, and 'lye opon the Ground, When I do hear our Children dear by fudden Death's abound.

GOD fmitten bath with fore Plagues, our Children young and inall, Which makes we weep exceedingly, and on CHRIST's Name to call.

It makes me weep in forrows deep,
to hear the dying means,
Which Death has made, in these our Days,
among our little Ones.

Such Punishment is often sent,
on Gos, el-Light Officuders,
For GOD is just, and has profess'd,
to punish such Transgressors.

This mortal Plague doth much carage, among our little Bands, And fodden Death doth flop the Breath of thefe our little Lambs.

GOD's holy Days, in many ways, we have not kept aright, But have been flack, and turned back, against the Gospel Light.

What mourning Sighs, and loud Out cries, comes from the Eaflt in Towns
Of Children crying, and other dying, which makes a doleful Sound.

Then Ici's repent with one confent, and pray both Day and Night.

What Tears apace, run from our Face, to hear our Children crying
For help from paid, but all in vain, we cannot help their dying.

By fore Droughts and Peftilence we've had most awful Calls,
And likewise by most dreadful Wars,
we've had great Warnings all.

My Pen and Heart I will impart to make this Declaration, Of Children dying, and others crying, a fad and strange Relation.

This strange Discase doth mostly seize those that are young and tender,
And 'tis so smart, it strikes the Heart,
and makes 'em to surrender.

O fad effate, and desperate, of these our little ones,
Who lye in pain, and so remain,
they help can find from none.

The D-stor's Art, can find no part, nor Cure for this Diffemper;
By Physick long, nor Cordials strong, they cannot find the Center.

Let Holines your Souls possess, ferve GOD while you are young, and CHRIST will be your own.

It is unknown to any one and all the Doctors skill, To cure this Plague, ar to engage to cure it at their will.

They're in the dark, in every part, and cannot find it out, from whence it fifties, and whoge it lights they cannot point it out.

Come let us all, both great and finall, both Young and Old together, Turn to the LORD with one accord, and mourn for Sin for ever. they cannot point it out.

If Doctors joyn, and do combine, to find out this Diffemper, They're in the dark in every part, and cannor find the Center.

We can't conceive, or do believe, that they were Sumers more. Then we have been, and lived in, O let us fin no more.

Let's fearch the Cause, "it's breach of Laws, that punishes for Sin,
That brings down Plagues in every Age, as it has ever been.

The loudeft Call we had of all, was by an Earthquake firong,
Which did us flake, and make us quake,
and from our Sins refrais.

They cry with pain, but all in vain, no fuccour can they find,

From Father, Mother, nor no other, for Death has them affign'd GOD's Judgments do abound.

Let's go alone, and pray each one, and turn from all Tranfreshee, With holy love to GOD above, and turn from all Opptellion.

Young Men and Maids, let me perfuade you to a Reformation, For this loud Call is to you all, of rifing Generation.

In youthful Days, live to GOD's Praife while you are young and tender,
And CHRIST will own, and GOD alone, will of your Lives be tender.

What tears apace, run from our Face, to hear our Children crying For help from pain, but all in vain, we cannot help their dying.

* * *

New England's Sins have greater been than Sins of Heathen round, Such breach of Laws, is the grand Cause, GOD's Judgments do abound.

* * *

Come let us all, both great and small, both Young and Old together, Turn to the Lord with one accord, and mourn for Sin for ever.

The weather was not as cold as usual, but a constant disagreeable chill in the air added to the discomfort. The severity of the disease also seemed to increase and the weekly Journal of Burials disclosed more and more deaths. Near the end of December the Governor proclaimed that Thursday the eighth of January was to be:

... A Day of solemn Prayer and Humiliation with Fasting, thro'out this Province on account of the unusual, malignant and mortal Distemper, wherewith several Towns within this Province are visited, and by which great Numbers, especially of the younger People, have been removed by Death; there being great Danger that the said Sickness will become more epidemical.⁴⁴

This proclamation was read in many churches throughout the province.⁴⁵ In February there was another proclamation:

Upon consideration of the holy Anger of Almighty God evidently manifested in the various Judgments inflicted on us (more especially in sending us a mortal Sickness, which has already greatly wasted our numbers, and threatens yet more terrible Effects, unless prevented by the merciful Interposition of Providence;) . . .

⁴⁴ Boston News-Letter, Dec. 18-25, 1735.

⁴⁵ "On Dec. 28, 1735, Mr. Dunbar read a proclamation on the matter of an unusual and malignant distemper in many towns of the province, which was likely to spread through the land."—D. T. V. Huntoon: *Hist. of Canton*, p. 180; also Timothy Orne of Salem entered in his diary: "Generall Fast for the Distemper @ the Eastward." Ms. in Essex Institute.



By His EXCELLENCY

70 NATHAN BELCHER, Esq.

Captain General and Governour in Chief in and over His Majesty's Province of the Massachusetts-Bay in New-England.

Proclamation for ageneral FAST.

PON Confideration of the holy Anger of Almighty GOD evidently inanifested in the various Judgments inflicted on us (more especially in fending among us a mortal Sickness, which has already greatly wasted our Numbers, and threatens yet more terrible Effects, unless prevented by the merciful Interposition of Providence;) upon Consideration likewise of our absolute Dependence on the Blessing of GOD for Success in the Interests and Affairs of the Spring and Summer ensuing;

have thought st, with the Advice of his Bajedy's Council, to order and appoint Thursday the First Dan of April next to be observed as a Day of solemn Fajing and Frager throughous this dealers, whereas are people religiously to arised the Duries of the Landing Day, by linere and penticular of their manifold dies, whereby Durties of for aid Day, by lineere and penitent Contestion of their manifold Dins, whereby GDD hath been provoked to vit this Reople with some and grievous Calamities; and by hamble and earnest Supplications to the GDD of all Grace some acerting the Zokens of his righteous Displeasure and conferring on us all needful favours: In particular, That he would long preserve the Lise of our Soverign Lord the KING and our most gratious QUEEN, together with his Royal highness the Prince of Wales, the Duke, and the other Branches of the Royal Family; That he would grant his merciful Justunese & Conduct to his Pagethy S Councils so: the Continuance of the Peace of his Kingsoms and Domitions, and so the ectioning of Peace to Europe, under his Pagethy s wise Pediation; That he would picale to dered and bless the Administration of the Soveriment of this Brodine; That he would give us a sabourable Seeds-Time, and in due Season a picatism darroes; That he would give us a fabourable Seeds-Time, and in due Season a picatism darroes; That he would give us a fabourable who be some allies and maximism the peace of our Sea-Loads and Juland-Borders; and that he would compassionate our great Distress under the wasting and mortal Sichnels, by sandifying this absult Clisterion and resorting to us the Molle of Health; and above all, That he would grant unto us the picalism shours of the Holls of health; and above all, That he would grant unto us the picalism shours of the Holls of health; had above all, Charles of his righteous Displeasure against usuap essent general Repentance and Resormation throughout the whole Land, and that thekingdom of our Look and Ambiout I E SUS CHRIST may come, and the whole Earth be filled with his Glory: And all service Labour and Recreations are hereby softwiden on said Day.

Given at the Council Chamber in Boston, the Twenty-fixth Day of February, 1735, in the Ninth Year of the Reign of Our Severeign Lord GEORG & the Second, by the Grace of GOD, of Grast-Britain, France and Iroland, KING, Defender of the Faith, &c.

By His Excellency's Command, with the Advice of the Council, 3. Millard, Secr.

F. BELCHER.

GOD fave the KING.

BOSTON: Printed by J. Draper, Printer to His Excellency the GOVERNOUR and COUNCIL.

Meanwhile, the Medical Society attacked their problem in true scientific fashion and made every effort to control this apparently new disease which was rapidly spreading throughout the town. They sent letters to some of the better known country doctors and requested specific answers to many questions. More information was wanted about the nature of this terrible disease, its various appearances, its usual course, and its most common complications. And a little while later they inserted the same questions in the newspapers requesting replies from any or all physicians who desired "to furnish their Mite, for the Good of the Publick... towards the History and Cure of the Epidemical Sore Throats, which at present prevail in New-England."

Either from the answers that were received or from the newspaper accounts it was learned that as yet no effectual remedy had been found and that the epidemic was still raging in the "Eastward" towns. From Hampton Falls, Dover, Portsmouth, and Newbury, the reports were all the same—many families losing all their children—and it was feared that similar catastrophes would soon occur in Boston. But in spite of the rapid spread of the disease some favorable and unexpected turn took place, and most of the Boston children quickly recovered from their illnesses. The mortality was not nearly so great as had been anticipated and recoveries occurred as quickly as anyone had even dared to wish. Now, why a disease that had been so frightful in New Hampshire should be so surprisingly mild in Boston was not difficult for the Boston doctors to explain. After all, it was perfectly obvious to anyone that superior medical ability had finally solved the problem and brought forth an effectual treatment. One kind soul, who "out of pity to his fellow Creatures, was willing to communicate his Judgment and Experience," and who was also very clever with a lancet, intimated that the country doctors had not opened the proper veins, so he wrote to the Boston Gazette:

Method of Cure of Throat Distemper . . . First be sure than a vein be opened under the tongue, and if that can't be done, open a vein in the arm, which must be first done, or all other means will be ineffectual. Then take borax or honey to bathe or anoint the mouth and throat, and lay on the Throat a plaister Unguintum Dialthae. . . . I have known many other things used, especially a root called Physick Root, filarie, or five-leaved

⁴⁶ Boston News-Letter, Feb. 12-19, 1736; Boston Weekly Post-Boy, Feb. 16, 1735/6.

physick; also a root that I know no name for, only Canker Root. But be sure and let blood, and that under the tongue....47

There were other Boston doctors, however, who held slightly different opinions because they had seen many patients recover without recourse to bleeding, so they concluded that the country doctors had probably bled their patients to death. Some explanation was indeed necessary for the higher mortality in the "Eastward" towns; obviously there must have been some fault in the treatment used by the country doctors. The Boston public were told on the front pages of their newspapers that these small-town physicians "altho' their bad Success evidently shews that they have no manner of Notion of the Nature of the Disease or Method of Cure yet persist in one invariable Method to kill very successfully, secundem Artem." Regardless of the various explanations, the fact remained that the "throat distemper" as it appeared in Boston was much more easily cured.

Although the frightening suspense was greatly relieved, the epidemic continued to spread and reached a peak in March, when during the second week there were twenty-four burials. A month later neighboring governments were still apprehensive that the distemper was carried by goods, and they had so restricted their Boston trade that the selectmen again summoned the physicians and requested their written opinion about the spread of the disease. It was voted to publish the comforting news:⁴⁸

Boston 24 April 1736

The Select-men of the Town of Boston, in order to inform the Trading Part of our neighbouring Colonies, concerning the state of the present prevailing Distemper in this Place, did desire a Meeting of as many Practitioners in Physick as could then be conveniently obtained. The Practitioners being accordingly met, did unanimously agree to the following Articles:

1. That upon the first appearance of this *Illness* in *Boston* the *Selectmen* did advise with the Practitioners; but they at that time having not had opportunities of observing the Progress of the *Distemper*, it was thought

⁴⁷ Boston Gazette—copy in New York Weekly Journal, March 8, 1735/6. Signed by N. H.

⁴⁸ Boston Weekly News-Letter, April 22-29, 1736. Report of the Record Commissioners of the City of Boston, containing the Records of the Boston Selectmen, 1716-1736. Boston, 1885, 294.

advisable (until further experience) to shut up that *Person* who was supposed to have received it in *Exeter* to the Eastward, upon his death the Watch was soon removed, but no infection was observed to spread in that quarter of the Town; therefore, no watches were appointed in the other Parts of the Town where it afterwards appeared, the Practitioners judging it to proceed from some occult *Quality in the Air*, and not from any observable *Infection* communicated by *Persons or Goods*.

- 2. The Practitioners and their Families have not been seized with this Distemper in a more remarkable manner (and as it happened not so much) than other Families in Town, even than those Families who live in solitary Parts thereof.
- 3. As to the Mortality or Malignity of this Distemper, all whom it may concern are referred to the Boston Weekly Journal of Burials; by the *Burials* it is notorious, that scarce any Distemper, even the most favourable which has at any Time prevailed so generally, has produced fewer deaths.
- 4. As formerly, so now again after many Months Observations, we conclude, That the present prevailing Distemper appears to us to proceed from some Affection of the Air, and not from any personal Infection received from the sick, or Goods in their neighbourhood.

Nathaniel Williams William Douglass John Cutler Hugh Kennedy William Davis Thomas Bulfinch.

Although the number of deaths continued to decrease, some excitement still prevailed, and on May 11, 1736, another fast was held at the Old North Church "for the benefit of the rising generation." When the epidemic was over it was supposed that about one-fourth of all the people in Boston had contracted the disease, and that out of the four thousand cases one hundred and fourteen had died.

V

THE DIAGNOSIS

If Doctors joyn, and do combine, to find out this Distemper, They're in the dark in every part, and cannot find the Center.

-A Lamentation.

⁴⁹ A. E. Bates: Almanac Notes, in Old Northwest Quarterly, Oct., 1907, 348.

In July, 1736, when the epidemic was "almost over," William Douglass (1691-1752) published The Practical HISTORY of A New Epidemical Eruptive Miliary Fever, with an Angina Ulcusculosa which Prevailed in Boston New-England in the Years 1735 and 1736.

William Douglass was born in Scotland, received a good medical education abroad, came to Boston about 1716, acquired a very successful practice, and for a long time was the only physician in Boston with a medical degree. If some of his biographers are correct, however, he was an irresponsible person never to be trusted. gests that his character be considered in somewhat more detail, because the exact diagnosis of the "throat distemper" depends in some measure upon his works. Early in his career, when the controversy about inoculation was at its height, Douglass had quarrelled with Cotton Mather and the clergy, for whom he had no respect. He was probably a little jealous when he doubted that the clergy were qualified to discuss purely medical subjects; nevertheless, he very rightly maintained that inoculation was a dangerous procedure, especially when haphazardly performed. He had an unfortunate way of expressing his opinions and long after the quarrel was over made enemies of those religiously inclined, and it was chiefly because of this disrespect for personalities and conventions that most of his biographers have had little respect for him. One said that he was "a scamp, perhaps, certainly a liar," and even a modern student of eighteenth century religious thought describes him as "a deist with a bitter contempt for revivalism—on all subjects a most partial and inaccurate writer."

Douglass also wrote a Summary, Historical and Political of ... the British Settlements in North America, and after a study based chiefly upon this work, another biographer wrote:

He was a man of large but heterogeneous knowledge, and blessed with a sovereign confidence in himself and his own opinions; and being also dogmatic, intolerant, of quick temper and boundless energy, fiery as a friend, still more fiery as an enemy, fond of strife, glib in speech, with a passion for rushing into print, his life was one prolonged and blissful warfare with all persons whom he could pick a quarrel with,—chiefly, his own professional brethren, likewise the clergy, the magistrates, and the successive governors of the colony.⁵⁰

⁵⁰ Moses C. Tyler: Hist. of Amer. Literature, 1879, ii, 151.

With this information about the man, one hesitates to trust his descriptions of the disease, but fortunately Dr. G. H. Weaver, another biographer, has considered Douglass' many contributions to medicine and science and presented him in an entirely different light.⁵¹ Douglass was intensely interested in botany, earthquakes, the weather, maps, and public school education. His criticisms of contemporary physicians, especially the quacks, were written in an effort to place the practice of medicine upon a higher plane. His studies on inflated currency make interesting reading at the present time. Weaver further describes him:

... he was the first really remarkable medical man in this country. He was a widely educated and skillful physician and his writings were a real addition to the literature of the world . . . Aside from his medical interests we must recognize in William Douglass a man of encyclopedic knowledge, of prodigious energy and perseverance, interested in all lines of scientific and human activity, a fearless public-spirited citizen, and an economist of high grade. It is time that we should recognize him as a man for any time and place, and should honor him for achievements accomplished under most adverse surroundings.

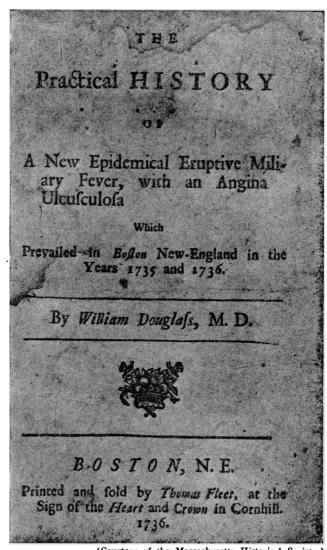
To any fair-minded reader the disease descriptions in the *Practical History* are ample proof that with all his faults William Douglass was capable of keen clinical observation. He describes in minute detail a typical case with onset, course, and treatment, and also some unusual varieties of the disease. One can almost make a diagnosis from the complications which he mentions. Those who are familiar with eighteenth century medical publications readily recognize this work as one of unusual merit and it deserves to be known as an American medical classic. Dr. Weaver, an authority on the disease, says that "it was the first adequate clinical description of scarlet fever in English . . . It seems impossible that any doubt could arise regarding the identity in the minds of any one who has read Douglass' description and is familiar with the disease." So we need not look beyond Douglass' *Practical History* for a diagnosis. There was an epidemic of scarlet fever in Boston during 1735-36.

But was it scarlet fever that was raging in New Hampshire? Douglass said:—"There is no Symptom, even the most malignant that has appeared in New Hampshire, but what the like has occurred

⁵¹ George H. Weaver: Life and Writings of William Douglass. Bull. Soc. Med. Hist. of Chicago. April, 1921, xi, 229-59.

in Boston." He was certain that the two epidemics were caused by the same disease. This conclusion seemed warranted, for here

in New England was an apparently new disease; here was an apparent (the contact How case) between Exeter and Boston: here was an epidemic that started in the country and spread swiftly from town to town and reached Boston about the time it was expected; and in both New Hampshire and Boston children were the victims and sore throat was the chief complaint. Medical historians agree that it was an epidemic of a single disease, but they differ in opinions of the diagnosis. Creighton,52 Weaver, 58 and



(Courtesy of the Massachusetts Historical Society.)

others have considered this to be the first great epidemic of scarlet fever in this country, but on the other hand, Jacobi,⁵⁴

⁵² Charles Creighton: Hist. of Epidemics in Britain. 1894, ii, 685.

⁵³ G. H. Weaver: Scarlet Fever, Abt's Pediatrics. 1925, vi, 298. ⁵⁴ Abraham Jacobi: A Treatise on Diphtheria. 1880, 4.

Packard,⁵⁵ and others have considered it to be diphtheria. Samuel A. Green wrote:⁵⁶ "It has been considered also to be scarlatina; but the description leaves little doubt in my mind that the diagnosis at the present time would be diphtheria." My own opinion is that neither scarlet fever nor diphtheria adequately explains the epidemic as a whole and that, heretofore, the diagnosis has rested upon incomplete evidence. It seems that the scarlet fever advocates have put too much emphasis on Douglass and that the diphtheria advocates have not given him sufficient consideration. I hope to prove that at the time of the Boston scarlet fever epidemic, diphtheria was raging in New Hampshire.

If this conception of the epidemic is correct, it may seem strange that Douglass should have given an accurate, detailed, clinical account and yet have drawn a false conclusion. The explanation is found in his own words. His account of scarlet fever is valuable because it was founded upon personal observation:

This is a Real History of the distemper as it appeared in Boston New England, taken clinically from life and not copied. There is no stroak or clause, but what I can vouch by real not imaginary cases. It is founded only upon observation or phenomina, that is upon the Symptoms that appeared in the course of this Epidemical disease; it must therefore be of permanent truth.

So far, so good; there was no chance for error so long as he described exactly what he saw. But he admits, and this is the point that has been overlooked, that his information about the New Hampshire epidemic was obtained from others—or to quote him—"as we were informed." It is probable that he received most of his information from the answers to his newspaper questionnaire or from Dr. Tufts at that first meeting of the Boston physicians on October 1, 1735.

Douglass travelled about New England to obtain material for his maps and botanical studies, but there is no evidence that he went to New Hampshire during the epidemic. There is good reason to believe that he did not go; he was a very busy practitioner and had more than he could do in Boston. Though it is begging the question somewhat, I firmly believe that Douglass, with his keen clinical sense, would have readily seen the difference in the diseases had he

 ⁵⁵ Packard: Hist. of Med. in United States. 1931, vol. i.
 ⁵⁶ Green: History of Medicine in Massachusetts. 1881, 69.

⁵⁷ Boston Weekly News-Letter, Feb. 12-19, 1736. On account of the similarity of many expressions in this questionnaire, and in the Practical History I believe that Douglass very probably composed most of it.

actually gone to New Hampshire. As a matter of fact, he did go to some of the neighboring towns at a later time and it is significant that following these personal observations, he wrote another somewhat different clinical account. The error does not make the *Practical History* a less creditable performance, for original disease descriptions are of utmost importance in man's warfare against disease. Medicine will always be indebted to William Douglass,—he was a valuable spy who went into the enemy's camp and returned with a description of his position and his numbers. Nevertheless, it is important to realize that the two diseases were confused, since it partly explains why scarlet fever and diphtheria were considered the same disease for many years.

The diagnosis of the New Hampshire epidemic has been surmised by many historians, but very few have offered supporting facts or reasons. The histories of the separate towns seldom yield enough information to make an exact diagnosis, but sufficient material concerning the whole epidemic is now available to support a diagnosis that leaves little room for doubt. The New Hampshire disease had four primary characteristics. It was a very fatal, childhood, epidemic disease that chiefly affected the throat, and therefore could not have been measles, influenza, smallpox, dysentery, or any other disease that does not satisfy the definition. Diphtheria, scarlet fever, and septic (or streptococcic) sore throat are the only diseases that need to be seriously considered. The last is regarded by some clinicians as fundamentally the same as scarlet fever but without a rash. It attacks adults as well as children and in epidemic form is generally caused by a contaminated milk supply. Now, in Boston and the larger towns many families may have received their milk from one supply, but in the smaller country towns almost every family had its own supply. For these reasons the diagnosis of streptococcic sore throat seems to be improbable, and for practical purposes only the first two diseases need be considered.

For the benefit of the non-medical reader, it may be said that on paper, at least, scarlet fever and diphtheria are similar diseases. They frequently occur in epidemic form, have a tendency to attack the same age group—children under twenty years—and are characterized by sore throat and fever. Swallowing and breathing may be difficult in both diseases. Indeed, it is sometimes difficult to distinguish the two diseases by the appearance of the throat alone. In the great majority of cases, however, diphtheria begins insidiously, has no rash, and is accompanied, if untreated, by a very high

mortality; scarlet fever begins suddenly, generally with vomiting, has a very distinct rash over most of the body, and, although it may be a very malignant disease in some epidemics, is usually less fatal than is diphtheria. It has already been stated that the disease in Boston was scarlet fever and now an attempt will be made to prove that the New Hampshire disease could not have been the same.

The fatality rate of a disease, or the number of deaths that occur in each one hundred cases, is frequently used, especially during epidemics, to compare different diseases or the same disease under different circumstances. Although it is seldom used for diagnostic purposes because of possible variations in the rate depending upon many complicating factors, it is of considerable value when applied to different phases of the "throat distemper" epidemic. Only a crude estimate can be made of the fatality rate of the New Hampshire and "Eastward" cases, as there are no available statistics of the number who recovered. Many were "brought down to the Brink of the Grave"; many had the disease "in a moderate Degree"; 58 undoubtedly many were unaware of their infection. was said that in some of the New Hampshire towns the fatality rate was "1 in 3 of the sick, in others 1 in 4, in scarce any fewer than 1 in 6." At Kingston, 60 Scarborough, 61 and Presumscot Falls 62 there were short periods when the fatality approached one hundred per cent. A closer estimate can be made from a tabulation of the Hampton Falls records:

_	% of			Fatality
A ges	population	Population	Deaths	minimum
Under 10	32.1	404	160	39.6
10-20	24 . 6	310	40	12.9
Under 20	56 . 7	714	200	28.0
Over 20		546	10	1.8
Total	100 . 0	1260	210	15.2

Fitch counted 210 deaths, which he said was about one-sixth of the total population. With the aid of some New England eighteenth century census figures⁶³ we may suppose that there were

⁵⁸ Jabez Fitch: An Account of the Numbers . . . p. 11.

⁵⁹ William Douglass: A Practical History . . . p. 3.

⁶⁰ Ibid, 1.

⁶¹ Journal of the Rev. Thomas Smith. Oct. 13, 1737.

⁶² Ibid. Aug. 16, 1738.

⁶³ Account of the Number of Inhabitants in the Colony of Connecticut, Jan. 1st, 1774. Hartford, 1774.

about 714 children under 20 years of age, and if we further suppose that every one of them contracted the disease, then the minimum fatality rate was 28 per cent for this age group. In the group under 10 years of age there were about 404 children with a minimum fatality rate of 39.6 per cent. Let us suppose that only one-fourth of all the children under ten escaped the disease, either because they were immune or not exposed during the first year of the epidemic, then, of the remaining 303 children, 160 died which would give a fatality rate of 53 per cent. Although this is a crude method upon which to base conclusions, I believe that it does show that the actual fatality rate in Hampton Falls was very high, and probably near 60 per cent. Taking all available sources into consideration, the fatality rate of the "Eastward" cases can be roughly estimated at between 16⁶⁴ and 60 per cent.

In comparison, the Boston epidemic was very mild indeed. Douglass said: "It is generally in so considerable a degree more favourable in Boston, than in the Townships where it first prevailed; that many can scarce be persuaded of its being the same Distemper." He compared the number of deaths during certain months of the winter and spring of 1735-36 with the number of deaths during the same months of previous healthy years, and computed that the epidemic was responsible for one hundred and fourteen deaths. He estimated that there were about four thousand cases of sickness, which would place the fatality rate at 2.8 per cent. Another observer of the Boston epidemic said: ". . . I believe that not one to sixty Dies thereof . . ." This would give a fatality rate of 1.7 per cent. Although these also are crude estimates, they disclose beyond doubt that the Boston epidemic was very mild compared with the one in New Hampshire.

It is interesting to compare these figures with more recent ones. For diphtheria statistics one must go back to pre-antitoxin days, and as that was the time when the diagnosis rested upon clinical evidence alone, the figures are not strictly accurate and therefore the comparison is questionable. Nevertheless, of forty thousand cases of diphtheria in New York and Boston during the years 1880 to 1887,

⁶⁴ This is the lowest contemporary estimate of the "Eastward" fatality rate that I can find. It is taken from the works of William Douglass, who, I believe, confused the two diseases and therefore it may be the figure for some Massachusetts town where there was a scarlet fever epidemic. Nevertheless, I have included it in the New Hampshire figures.

⁶⁵ Signed "N. H." in New York Weekly Journal, March 8, 1735/6.

the fatality rate varied from 26 to 49 per cent. For a number of years the scarlet fever fatality rate has steadily decreased. Seldom has it been over 30 per cent; the rate in eight American cities with over 500,000 cases from 1873 to 1913 was about 10 per cent; the Connecticut rate from 1895 to 1929 varied from 6.6 per cent to 0.6 per cent, with an average five-year-period rate of 3.2 per cent. To summarize these figures on fatality rates:

	Scarlet Fever	Diphtheria
Boston 1735-1736	1.7–2.8	•••••
Connecticut 1895-1929	3 .2	•••••
Boston & New York 1880-1887		26-49
New Hampshire ⁶⁹ 1735-1738		16-60

These figures indicate that diphtheria was the probable cause of the New Hampshire epidemic. Indeed, the fatality rate of untreated diphtheria could not possibly be under three per cent and the fatality rate of scarlet fever has never approached sixty per cent. If the fatality rates of the "throat distemper" are at all accurate, it is certain that two different diseases were present.

The death-rate, or the number of deaths in proportion to the population, is also used to compare diseases, especially during epi-Fitch estimated that in Hampton Falls one-sixth of the population died, which is at the rate of 166.6 for each one thousand In Byfield, Mass., one-seventh of the population died. The population of Kingston in 1735 was probably less than a thousand, and so the estimated death-rate is over 100. Apparently the rate was somewhat less in Portsmouth, Exeter, and other places, but slightly more in Haverhill. The total population of New Hampshire has been estimated at 20,000 and by actual count there were about 1000 fatal cases during the first year of the epidemic (July 1, 1735-July 1, 1736). This rate of 50 deaths for each one thousand people depends upon the accuracy of the population estimates and upon the accuracy of the diagnosis in Fitch's series, nevertheless it is in striking contrast to the estimated death-rate for Boston, where, during the same period, there were 114 deaths among 16,000 people, or a rate of 7.1 deaths for each one thousand Some objection may be raised to this comparison of deathpeople.

⁶⁶ Billington and O'Dwyer: Diphtheria. 1899, 139.

⁶⁷ Donnally: Quoted by Weaver in Abt's Pediatrics. Art: Scarlet Fever.

⁶⁸ Conn. Health Bulletin. 1932, xlvi, 214.

⁶⁹ Including other "Eastward" towns.

rates because it is thought that epidemic diseases behave differently in rural and urban populations, nevertheless the difference is too great to be overlooked and has additional importance when taken with the other facts.

Some students readily admit that the New Hampshire epidemic was more severe, but they still believe that it was the same disease and that it became milder as it invaded Boston. This conclusion is based on the theory that epidemics may be very severe at first and become milder as time goes on. This supposition does not explain other facts. The epidemic was severe in Haverhill at nearly the same time that it was mild in Boston; it was severe in Marblehead in 1737, which was after the Boston epidemic had quieted down. As will be shown later, some towns had two epidemics, one more serious than the other, and it is extremely difficult to explain such facts on the assumption that one disease could show such variations.

Although occasionally found in very old genealogical and church records, multiple deaths are more frequently found during and after 1735, and most of them can be attributed to the "throat distemper." The term "multiple deaths" is here used to mean the deaths of two or more children of the same family within approximately one month. I believe that they have considerable diagnostic significance in separating the two diseases comprising the epidemic, because such deaths are characteristic of the disease in New Hampshire and other "Eastward" towns. A few of the countless instances have already been given, but here the family record of John and Jemima Boynton of Newbury will serve as an extreme but not unique example:

```
Mary Boynton died December 20 1735
Sarah
                 December 20 1735
        "
Tohn
                 December 21 1735
William
                 December 21 1735
        "
David
                 December 26 1735
              "
        "
Francis
                 December 26 1735
Samuel
                 January
                           4 1735/6
         "
Temima
                 February 11 1735/6
```

I do not believe that scarlet fever caused these deaths. At the present time, at least, that disease seldom causes two deaths in the same family. Even in the days when the scarlet fever fatality rate was said to be 20 to 30 per cent, it would seem improbable that in a family of eight or ten children all would get the disease, and, if they did, also improbable that more than two or three would die.

Moreover, scarlet fever deaths generally occur as a result of complications and the six to eight deaths in the same family would probably be spread over a longer period of time. It is said, however, that during some epidemics scarlet fever has been known to cause many deaths in many families. Osler mentions the deaths in rapid succession of four or five members of a family as an illustration of family susceptibility to the disease. The Vital Records of many Massachusetts towns show multiple deaths between 1839 and 1850, and the diagnosis is given as "scarlet fever." So, for the present, it is admitted that scarlet fever can be very severe in certain epidemics and that it has caused multiple deaths in the past, but all the available evidence indicates that scarlet fever during 1735-40 was not very much more serious than it is today and therefore was incapable of causing repeated multiple deaths. The figures given by two independent observers of the large Boston epidemic show conclusively that it was a comparatively mild disease and there is additional evidence that it was mild in other towns. Also, it must be evident that with only 114 deaths out of 4000 cases, there could not have been many instances of multiple deaths during the Boston epidemic. Douglass mentions that multiple deaths occurred in the "Eastward" towns, but neglects to say that they occurred in Boston. Therefore, during the time of the "throat distemper" epidemic (1735-40), if frequent and extreme examples of multiple deaths can be found, I believe that the diagnosis of diphtheria is justified. On the other hand, the occurrence of two, three, or four deaths in a single family has no significant diagnostic value.

In addition to the marked differences revealed by death-rates, fatality rates, and multiple deaths, there are differences in the clinical descriptions of the New Hampshire and Boston epidemics. One must be cautious in the selection of material. Most historians of the New Hampshire and Maine towns describe a disease that resembles scarlet fever, but the similarity in wording and phrase-ology show that these historians, almost without exception, have copied their material from a common source—Belknap's History of New Hampshire. Belknap, writing in 1791, obtained his information from William Douglass' Practical History, so the descriptions apply not to the New Hampshire epidemic at all but only to the Boston cases. Therefore, one cannot rely upon nineteenth century histories and must admit only contemporary evidence.

The most important and complete description of the "Eastward"

cases appeared in the Boston Gazette. The particular issue does not seem to be extant, but the description was copied by the publisher of the New York Gazette (Feb. 17-24, 1735/6). Although originally published in Boston, the writer definitely says that his description applies to the New Hampshire epidemic:

No Disease has never raved in New England (except the Small-Pox) which has struck such an universal Terror into People, as that which has lately visited Kingston, Exeter Hampton and other Parts of the Province of New-Hampshire, and tho' something has been divers Times said of it in the publick News Papers, it yet wants a Name. It has been among young People and Children, pretty universal and very mortal; but what surprizes me most is, that the Physicians in those Parts (altho' their bad Success evidently shews that they have no manner of Notion of the Nature of the Disease or Method of Cure) yet persist in one invariable Method to kill very successfully, secundem Artem. This Disease invades generally such as are very young, but they feel at the first somewhat listless and heavy for a Day or two, and then begin to complain of a Soreness in the Throat, and if you look into the Motion you'l discover upon the Uvula and Parts adjacent the Cuticula raised in Spots of different Sizes, sometimes to a quarter of an Inch Diameter, and fill'd with a laudable coloured Pus. This is the pathognomonick Sign of the Disease. In a Day or two more, they have the same Cough as in the common humorous Quinzey; the next Day a Fever rises, and the Cough is often between whiles very loose; the Patient now begins to breath hard, and almost loses his Voice, being able only to whisper; and a Day more makes (with Coughing) only a whistling kind of Noise, and the next Day pays his Debt to Nature. These are the different Stages of the Disease, which, as the Disease is more or less fierce, are longer or shorter. . . .

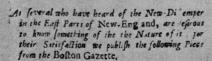
This article, which appeared at very nearly the same time as Douglass' account of the Boston epidemic, not only establishes the diagnosis of the New Hampshire epidemic, but it is the first printed description of unquestionable diphtheria to appear in America. In it, as in other accounts of the "Eastward" cases, no mention is made of any rash, whereas in the Boston epidemic the rash was the most significant finding, as is shown by the title of Douglass' Practical History. Moreover, Douglass himself stated that in New Hampshire the eruption was "noticeable only in a few, and in these it was called a Scarlet Fever." This statement supports my thesis but, unfortunately, it is not a first-hand description, for, as I have said before, Douglass probably obtained his information about the New Hampshire cases from someone else.

The Kingston church records state that "This mortality was By



New-York Gazette

From Tuesday February 17. to February 24. 1735



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It fometimes begins with finall Excoristions behind the Ears, which increase to a great Bignels (with swelling fometimes so large as to meet on the Forehead. In this Case the Patient is fametimes blind with it.

in others the parotid Glands are tumefied and explcerate, fo the Axillary, but the Inguinal rarely.

Oftentimes Tumours srifelike a fmail Boil,

break and spread to g or 6 Inches Diameter; these affect chiefly the bipder Part of the Head and Neck, between the Shoulders, the Back. &c.

When the Sores turn I ved or purple, Death is at hand. Many have the Tamour and Sores who have no Sign of the Difeale in the Throat, and vice verfa.

U; on breathing a Vein (which by the bye in this Discase, is a pernicious Practice in general) the Texture of the Blood appears to be much

A Fever arising is a good Symptom. A Strangury often arises from the Method of Cure, and which is pretty eafily obviated.

Bliffers to the Neck or Arms generally prove satal, it being almost impossible to heal them; and no Wonder.

When they receiver, they are a long time generally in getting well.

They very frequently die within 4 or 3 Days after the first Seizure, but rarely fooder, and

fometimes after 15 Days.
The Indications to be fatisfied in this Difegle are many, and fometimes coincide.

I thought proper to give these few loose Hints of this Disease to the Publick, that they may have some true information of it, and that the Physicians in the Country may have time to emply their Tho tsupon it, not knowing but it may become fo general; as fooner or later, to employ the most we have.

Lam, SIR, Your humble Servant ESCULAPIUS.

An ODB for the goth of January, w'ich fieuld have been inserted b fore.

Lest Martyr, for whose Fate,

And four fore- Fathers Crimes we weep;

And shill she sad Memorial keep,

From blest abodes couldn't thou look down, Thou wou'dst with pity own

The Writain's fafferings, as her guilt, are great
Twice eight hundred years before.
Like thee, by his Subjects try'd,
A Crown of Thorns thy Matter hore.
The world's great Soversign, as a Traitor, dy'd.

How was thy Brittania toft!
Forc'd for twelve dismal years if engage,
With adverse Storms of civil Rage, A Tempest fell by Euries sent, So long! so violent!

a Kanker Quinsey or Peripn[eumony] . . ." At that time "Quinsey" meant something very different from what it means today. Elsewhere, two good clinical accounts of what was then called "Quinsey" have been quoted and undoubtedly the condition was diphtheritic laryngitis. The significance of "Peripn[eumony]" is not so clear. Laymen often confuse laryngeal obstruction with pneumonia, and besides, pneumonia is a frequent complication of untreated diphtheria. At any rate, there is nothing here in favor of scarlet fever.

It was said that during the Kingston epidemic, "Children while sitting up at play would fall and expire with their playthings in their hands." This is quoted from a source⁷¹ that contains many inaccurate statements and so is of questionable value, but it could hardly have been an imaginary account because it is an accurate, concise, text-book description of a late complication of one of the two diseases—diphtheria.

Sudden heart failure may be seen late in diphtheria.... It may occur with few or no premonitory symptoms; as when a child falls dead after walking across a room, or suddenly sitting up in bed, or from some other muscular effort, or possibly as a consequence of passion or excitement. We knew of one little girl who was considered well enough to go coasting and who died suddenly after the effort.⁷²

This complication occurs occasionally, but not frequently, in scarlet fever. Douglass does not mention anything comparable to it in his account of the Boston epidemic.

Text-books say that if suitable precautions are not used diphtheria may be carried by physicians and attendants to their own homes, and in this connection there was another difference between the two epidemics. In the "Eastward" towns, multiple deaths in the families of Rev. Ward Clark of Kingston, Dr. Deane of Exeter, Rev. John Brown of Haverhill, Rev. Pain Wingate of Amesbury, Dr. Joseph Hills of Newbury, Rev. Benjamin Allen of Purpoodock, and in the families of many other ministers and physicians is fair evidence that the disease was carried by a third person. In Boston this feature of the epidemic was absent and the selectmen considered it significant enough to advertise the fact:

⁷⁰ New York Gazette, Feb. 17-24, 1735/6. Type 6 of Dickinson's Observations. See also, Caulfield, E.: An Essay on the Rattles. J. Pediat., 1936, Feb., p. 226.

⁷¹ Farmer and Moore: Collections, Topographical, Historical and Biographical, etc. loc. cit.

⁷² Holt and Howland: Diseases of Infancy and Childhood. 1922, p. 996.

The Practitioners and their Families have not been seized with this Distemper in a more remarkable manner (and as it happened not so much) than other Families in Town, even than those Families who live in solitary Parts thereof.

In the histories of some of the other towns, later to be described, there is additional evidence that two diseases comprised the "throat distemper" epidemic. Not a single item has been found about the New Hampshire epidemic that is not compatible with the diagnosis of diphtheria, yet there is a great deal of evidence that cannot possibly be explained on the assumption that scarlet fever alone was responsible for it all. But before the diagnosis of two separate epidemics can be finally accepted there is one apparent discrepancy to be explained. It will be recalled that the first fatal case (How) during the Boston scarlet fever epidemic had become infected while visiting in Exeter and it was clearly an instance of direct contact. Douglass, who probably saw the patient, relates his history:

He was lately arrived from Exeter to the Eastward, where his Brother died of this Illness; his Symptoms were great prostration of Strength, a speck in one of his Tonsils, colliquative Sweats, Pulse not high and full, but low, hard, stringy unequal and more frequent than natural, deglutition good to the last, no Sphacelation in the Throat, no eruption; from a rash inconsiderate opinion of forcibly quelling the malignity, he was thrice let blood, had some Emeticks and Catharticks administered, and by profuse evacuations was gradually reduced, so as to die of a gentle decay of natural strength, the 6th Day of Illness.

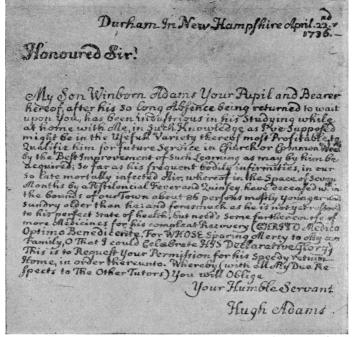
This boy did not have scarlet fever. He contracted diphtheria in Exeter, returned to live with his mother in Boston and it is probable that very few children were exposed. The house was guarded by a "watch" and "no infection was observed to spread in that Quarter of the Town." In spite of contemporary opinion, the Boston scarlet fever epidemic had no relation to the How case whatsoever; that epidemic was first observed in the opposite end of the town and was well under way before How arrived in Boston.

Why the "throat distemper" was more severe in some Massachusetts towns than in others can be more readily explained on the basis of two separate epidemics, but without detailed records and clinical descriptions it is almost impossible to tell which disease prevailed in any particular town. In Boston, as in New Hampshire, the distemper was not considered to be contagious, so with two large foci of infection and unrestricted travel either disease or both

could break out at various times. Undoubtedly there were numerous diphtheria carriers emigrating from the "Eastward," but records like those of the How case are not easily found. Scarlet fever

To
M. Nathan Prince
Fellow
Of Harvard Colledge
In Cambridge
Deliver These

carriers also cannot be easily traced, but in this connection there is an interesting letter in the Massachusetts Historical Society written by the Rev. Hugh Adams of Durham to Nathan Prince of Harvard. It is dated April 22, 1736, which was shortly after the Boston scarlet fever epidemic had reached a peak. Adams was concerned about his son who was supposedly still suffering from the effects of diphtheria



(Courtesy of the Massachusetts Historical Society.)

contracted during the Durham epidemic. The father may not have been alarmed about the rapidly spreading Boston epidemic, nevertheless he wrote:—"... This is to Request your Permission

for his speedy return Home..." The son returned to Durham; and it is probable that many others in Boston and vicinity "speedily returned home" at the height of the epidemic and spread scarlet fever over all New England.

The Boston physicians were very much aware that the "throat distemper" of the country towns was not accompanied by a rash and was more fatal than the Boston kind, yet they became more and more convinced that it was all the same disease and explained the differences in a very clever way. Their theory was that the distemper was caused by some "morbifick matter" in the blood and that it was only necessary to prescribe some efficacious remedies which would allow the poisons to reach the skin surface, evaporate through the pores, and thereby produce a rash. This rash was an indication of successful treatment and offered a plausible explanation of the high mortality in New Hampshire. There the people lived near "salt water damps"; they were "great pork eaters"; and, of course, they never had the proper medical attention. Therefore, the rash was "noticeable only in a few." In Boston, on the other hand, the patients were more vigorous, lived in the pleasant Boston atmosphere, and had excellent physicians who always prescribed effective remedies. Needless to say, the rash invariably appeared and very few were lost. The Boston people had many reasons to be thankful.

This "morbifick matter" theory was not new and had been applied to other diseases many years before, yet it explained the "throat distemper" facts so well that the Boston doctors became thoroughly convinced that it was the only true explanation. More than any other factor, this theory was responsible for the confusion of scarlet fever with diphtheria, and the two diseases were regarded as different manifestations of the same disease for at least another century. Diphtheria came to be known as "canker" and scarlet fever as "canker rash" and it was not until almost very recent times that the two diseases were proved to be distinct. In certain respects. this "morbifick matter" theory has influenced kitchen medicine for generations and persists down to this day. Every grandmother knows that some diseases are more serious "when the rash strikes inward," and this persistent lore is the basis for that well-known treatment for the measles which consists of hermetically sealing up the sick room, the liberal use of sweaters, woolen blankets, hot baths, and all sorts of warm drinks in order to "bring out a good rash" and thereby rid the body of its poisons.

[The concluding portion of this paper will appear in the March issue.]